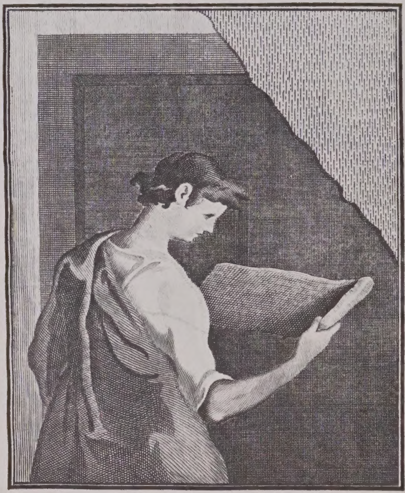

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PENCIL POINTS
VOLUME V JANUARY 1924 NUMBER 1

SYSTEM?

HOW much or how little system there should be in an architect's office is a matter upon which there is a wide divergence of opinion. What do you think about it? By way of starting the discussion of the subject we present in this issue descriptions of the methods of handling the work in many offices in different parts of the country. In these contributions the architect or a member of his organization tells how the office is run. Some of these men believe in rather elaborate systems, others have very simple methods of conducting the work of the office. In a number of cases the contributors to this symposium have sent sets of their office forms. Many of these are reproduced in these pages and this opportunity to study the forms used in other offices should prove helpful, for an exchange of ideas is always good.

We want letters from architects, office managers and draftsmen on the subject of "Office and Drafting Room Practice." If you are a member of an organization where what is sometimes called the "factory" system is in force won't you write to Pencil Points telling just how it works, from your point of view? If you dislike it let us know why. If it makes things move smoothly and the conditions are generally more satisfactory than in a less elaborately organized office let us know about it. If you see loss of time and effort in your office through duplication of work, delays or other results of the lack of a proper organization write about it.

If you are an architect and have worked out a system of handling the work that you believe may be helpful to others, won't you describe it to Pencil Points?

Pencil Points does not believe in system for system's sake; we agree heartily with all who protest against turning an architect's office into a factory, but all must admit that the proper handling of the work requires some method and that it is important for each office to have the method best suited to its needs.

Organization carried too far may easily result in the production of uninspired architecture. But isn't it equally true that when an architect burdens himself with office detail beyond a certain point he is unable to do his best work because of the drain on his energy and the demands upon his time that are made by matters that might well be attended to by others? Then, too, the architect with a small organization is limiting his production.

Though there are some architects who limit the amount of work they do as a matter of choice, it is probable that most men are willing and ready to take all the work they can get and to expand their organizations to take care of it.

All architects who appreciate the importance of making the work move smoothly, rapidly and with due economy from start to finish will find something of interest in the first-hand descriptions of office methods and the collection of office forms printed in this issue.

While system carried to the extreme can make an office a very unpleasant place to work in, an orderly way of conducting the work contributes to the comfort of every one. In many cases if the office were better organized there would be less "driving," and less friction, work would be turned out better and faster with less effort all around.

This is a subject that vitally concerns the draftsman as well as the architect. It is also a matter that concerns the contractors and the men who supply materials and equipment, for some, at least, of the delay and friction incident to building operations are traceable to the imperfect way in which the architect's office functions. We should like to hear what contractors and materials men have to say about the way architects conduct their offices. It may prove enlightening.

There is another angle of this subject that it is well to keep in mind, namely, the more successful an architect is in the conduct of his practice the better salaries he is able to pay to the members of his organization and the more steady employment he is able to offer. As we have pointed out before, the draftsman shares, in a considerable measure, the fortunes of the architect. Better office and drafting room methods benefit every member of the organization.

There is another point that we wish to touch upon. It is this. Why not endeavor to put as much of the atelier spirit as possible into every architect's office, to have all work together very much in the way that *patron, ancien* and *nouveau* work together in the atelier? Of course there is now much of this spirit in many offices, but a conscious recognition of the desirability of it would increase its effectiveness. And, always, there must be some system, be it ever so simple, for the handling of the work.

We hope that the publication of this issue will lead to a discussion of "Office and Drafting Room Practice" in following issues that will be as helpful as the discussion of "Specification Writing" that was started in our issue of last January and continued in following issues. You are invited to write an informal letter on any angle of this subject. Let us hear from you.

OFFICE AND DRAFTING ROOM PRACTICE

A Symposium

By Robert Maurice Trimble, Architect, Pittsburgh, Pa.

IN an article of this character distinction should be made beween the average small office in which the principal handles most of the business, and the larger office where the great amount of business makes such practice impossible, and makes it necessary to apportion some of the different duties to the associates.

In my office, which is in the first class, I conduct most of the conferences with the clients. In the preliminary conferences the character of the building is discussed, its use and type, the site, and the contemplated expenditure. After the first consultation a visit to the site is necessary to ascertain its characteristics, its physical conditions, drainage, compass points, etc.; all of which features have an important bearing on the plan, as well as on the design of the proposed building. If the client is wise he will consult his architect before purchasing the site and be guided by his advice in its selection.

The next step after the selection of the site is the preparation of the preliminary studies, which are made roughly to a small scale; in the preparation of these studies every possible development of the scheme is tried until the one which seems to best meet the requirements is evolved. The sketches are then worked up to a 1/16" or 1/8" scale depending upon the size of the building, and include all floor plans which are considered necessary to properly convey the scheme to the Owner; they also include the elevations or a perspective, and occasionally sections, although in my office we rarely submit sections with preliminary sketches. We generally prepare sketches in pencil and render them in water color, or with colored crayons. Sometimes in the smaller operations, and usually in the larger ones, the sketches are made in ink and more or less elaborately rendered, depending upon the amount of time at our disposal.

When the sketches are completed another conference is held with the Owner in which they are explained to him, the cost is discussed, and the Architect makes an appropriate estimate, based on the price per cubic foot which seems applicable to the building under consideration. Sometimes the sketches are submitted to one or more Contractors for an approximate estimate. If the sketches do not meet the requirements of the Owner as a whole or in part, they are restudied and revised until they are satisfactory. If the scheme as proposed is too costly the Owner decides upon what he is willing to sacrifice and the sketches are revised to reduce the cost.

After a satisfactory scheme has been decided upon, the working drawings are begun to an eighth or quarter inch scale, depending upon the size of the building. Although we often feel that we have secured the best possible solution of the problem when the sketches are completed, we continue our studies during the preparation of the working drawings and make improvements in arrangement and detail wherever possible, making changes to such an extent that in the finished working drawings the final scheme, both as to plan and elevation, differs quite radically from the original one. The working drawings should contain all information necessary to allow the Contractors to submit intelligent bids; and should be illustrated by scale drawings and sections of the more important or complicated parts. No set of working drawings is complete which does not fully set forth the intention of the Architect as to the quantity and quality of the materials required for each portion of the building.

The specifications are intended to supplement the drawings, and to inform the Contractors as to the materials to be used and the method of installing them. This question was so exhaustively covered in the special "Specification Number" of PENCIL POINTS that it does not seem to be necessary to enter at this time into further explanation of their preparation.

I have never been able to find a method of producing working drawings quickly i. e. working drawings which are properly studied, which contain all necessary information, and which are really worthy to be called complete instruments of service. Of course we finish them up sometimes in pencil on linen and tracing paper and this saves time, but we never seem to be able to turn them out as quickly as do some of the offices we hear about. This in spite of the fact that we often start the working drawings in pencil upon the paper or linen on which they are to be finished and eliminate the labor of tracing.

After the plans and specifications are completed they are blue printed and issued to the different Contractors for bids; from four to ten contractors are usually asked to bid and to each is given a set of prints, and from one to two weeks is allowed for the preparation of the bids, as I believe it better to crowd the Contractors a little and to keep all of the bidders on their toes, than to allow too much time; the results are usually better, in interest as well as in price.

When satisfactory bids have been received (what a joy these days) we prepare the different contracts, generally using the A. I. A. forms. Then the operation begins and with it our troubles. One of the most important duties of the Architect is the work of supervision. I have often said that the work of the Architect as evidenced by his plans may be perfection itself, but that through the employment of incompetent Contractors, and on account of the lack of proper supervision the building may be so badly botched in execution as to be a bitter disappointment to both Owner and Architect. We may think and believe that we are not responsible for perfect execution but if we are not responsible, who is? The Owner certainly looks to us to see that his building is erected in accordance with the plans and specifications, and without vexatious delays, so it is up to us to see that this is done, and to charge enough for our services to allow us to do it.

The proper method is to have a Clerk of the Works constantly on the large jobs, and to have frequent visits, of the principal or a superintendent, made to the smaller ones. The office should keep in constant touch with every job. I reiterate that the greatest fault to be found with the average Architect, and the one which causes most of the trouble between him and his client, is that of improper supervision.

The best way to have a job move smoothly and quickly is to see that the Contractor is not delayed by being obliged to wait for drawings, details, and necessary information, or because sub-contracts have not been awarded soon enough. Most Contractors are willing and anxious to push the work; many Architects are responsible for their inability to do so.

The scale and full size details are usually made during the erection of the building, and these should be made before they are needed if the work is to progress with any degree of rapidity. In some offices scale and full size details are made with the working drawings. This is an excellent method in many ways as it shows the Contractor exactly what is required, and permits the Architect to push the Contractor to the limit after the contract is awarded and robs him of his usual excuse for delays, "Waiting for details."

After the award of the contract the number of conferences between the Architect and Client depends largely upon the client; some like to keep in constant touch with the Architect, to visit the building with him, and to drop into the office to look over the detail drawings; others feel that, with the award of the contract within the price limit, their troubles are over and they can trust the Architect to have the work properly done and to see that the building is completed on time.

The above is necessarily a brief resume of the work of the Architect, as one with even a brief experience in practice could write volumes on any of the different phases outlined above; he could tell of the trials and tribulations, and heartburnings on the one side, and on the other, of the joy of accomplishment, of seeing the product of hard labor materialize into concrete form, and of the pleasure of watching the building of his dreams grow and grow until it develops, in his own mind at least, into the noblest structure ever erected.

By Aaron G. Alexander, of the office of Hobart Upjohn, Architect, New York

THE Architects who desire to make a success of their work can be divided into two classes. First, the Architect who is perfectly satisfied to do a small amount of work, thereby never intending to have a large organization. Second, the one who dreams of having the largest practice, necessitating a large organization. It is of the latter that I wish to write, as the former can maintain his office without surrounding himself with a large force.

I think in starting off I am safe in saying that the Architectural profession has come, owing to competition and the gradual increase of size and number of jobs handled by the modern Architect today, to a point where the Architect must combine "business" with his profession. It is not only a profession and an art but he must also look at the business side of the profession to satisfy his clientele.

There is always the fact contrary to the belief of the general public, that the average Architect does not retire rich. I mean in the same light as the lawyer, doctor, etc., who is purely a professional man. I think the answer lies in the fact that the Architect has kept his business more of a profession and therefore is not a business man in spite of the fact that his work has increased. Because of this increase, the modern Architect should surround himself with a business organization. The average Architect is not a business man and to do the best work, that is, designing and planning monuments to his name, he should not have to worry about the business end of the game. When his clientele becomes of a size where he is able to maintain a drafting force of ten draftsmen, he is getting to the point where he is carrying on more work than he himself can handle and still retain his health.

First of all he should secure a business manager who has the ability to take off his shoulders the running of the office, such as outlining drawings to be made on certain jobs, writing the specifications, issuing orders, drawing up contracts, issuing certificates, etc., leaving the Architect free to devote his entire time to having his work reflect his personality, because that is why the clientele selects a certain Architect, and his work should portray that expression. The Architect's duties then become the interviewing of clients, the securing of work, outlining the preliminary designs and planning and turning over to the manager what his ideas are for such a building, and the manager, taking these in turn and after study turns them over to the Chief Draughtsman who draws the plans.

In some offices the work is so large that it is sometimes essential to secure the services of a specification writer who thereby relieves the office manager of the necessity of meeting salesmen, and who keeps the data in the proper files and who can write the specification quickly and economically, but in the average small office the work is not generally so rushed that the office manager cannot take care of this. Beside the duties outlined for the Architect, he should be left free also, to inspect the work from time to time. This point I wish to emphasize, as the lack of supervision of the Architect is justly criticised by the client and a great many Architects turn over this supervision to someone else and do not give the proper thought to carrying out his original ideas. I don't mean by this that he should not turn over a certain amount to someone else for supervision, but he should visit the job occasionally so that the client feels that he has his own as well as the client's interests at heart.

If the organization grows to such a size, which I might safely say it should under such a procedure as I have outlined above, the manager should be given the authority to secure additional service if he finds it physically impossible to complete all his duties. If he needs an assistant in the office or an outside man to keep in touch and report progress of work; working in conjunction with the Architect or specification writer, he should secure this additional help as the case may be.

Now taking a commission on the above mentioned outline in a small office. The Architect interviews the clients, secures his ideas and makes a small, preliminary rough sketch of what he desires. The office manager, after looking it over, places this in the hands of the Chief Draughtsman, of course, first discussing the entire procedure with the Architect, and the work is started with the best draughtsman for that class of work. In other words, if this commission happens to be a building in a certain period or of a different type such as a Hospital, Library, Church, Residence, etc., there is generally, in the office, certain draughtsmen who are conversant with the different periods better than they are with others and it should be the duty of the office manager to see that the organization contains draughtsmen who are more efficient in certain types so that when the time arises he will have a man who can do this work. Of course, this is not necessary where the Architect specializes only in one type of work, such as schools, for instance, in that case his organization should be made up only of school experts.

When the plans have advanced to a certain stage, the modern office should take advantage of all the different agencies that are now existing for the advertising of bids and the securing of data on different products. I feel sure that there are a great many Architects today who do not realize what a vast amount of help can be obtained through these agencies. Then the question of specifications comes along and this is written and the agencies who handle the materials can be referred to and will be found of great help. Then the plans are issued to an invited list of general contractors. In this connection I believe that it is no more than fair that the old procedure of not letting the contractor know who he is bidding against should be overruled and the names of the contractors should be given some one of the numerous trade papers, as I feel it is a distinct advantage to the Owner that these names be published. I say this because the Architect, lots of times, specifies a product outright because he has used it for years and it has always been satisfactory, but owing to the vast amount of competition there is on the market, a competitive concern may have a product that will answer the requirements of the Architect equally well at a cost that may allow the Architect to carry on the project, and I therefore feel that it is not advisable to specify outright any one particular item. Of course, the Architect should always have the power to pass on whether this material equals the specifications.

The office manager receives the bids and a meeting is called with the client, and these are turned over to the Architect who presents them to the client and upon receiving the Owner's approval on one of these, the Architect turns this contract over to the office manager to draw up the proper contract forms for signatures. The work is then started and building laid out under the supervision first of the Architect, as he should be on the site and see that the building is properly placed. After that such questions as to whether the excavation is proper, etc., can be handled by the manager or his assistant, but the Architect is from this point on relieved of the general carrying on of the contract with the exception of his occasional visit to the site as spoken of herein, leaving him free to secure additional work.

In securing additional work, I should like to take this opportunity of saying just a word as to the general feeling of the Architectural profession against what is termed as advertising. It is generally considered unethical to advertise and there is no denying that old saying that a satisfied customer is your best advertiser, but the writer feels that there is still a big field to be open to an Architect if the proper sort of advertising were carried out.

Pick up any one of the Sunday real estate supplements and what greets the eye? Two or three handsome buildings shown in architects' sketches and under them are titles that this is a new building to be erected at such and such a corner and generally nothing said about the Architect, but plenty about the Owner and the real estate dealer who closed the contract and if a contractor has been selected he is also mentioned. Why is this? My answer to that is that the Architect is left out simply because he does not advertise and therefore is not taken note of by the papers. Now if the Architect today were more in the habit of writing articles on the buildings he has erected, giving data, that is bound to be of interest to the General Public and giving these to the newspapers to be used as news, he would receive more recognition by the papers. Again, I feel that the Architect today is in the habit of advertising too much in the wrong sort of papers. The Architect has always before him the various architectural magazines and he has only to call the publishers of these papers and submit photographs of buildings that he has built and when these appear, he buys several of them and sends them to his friends. I trust the readers will not misunderstand me, as I am not stating this in criticism as there is, of course, a certain amount of good advertising in this, but instead of just advertising in these periodicals, if for instance, he specialized in school work, why shouldn't he be willing to pay a small amount to have a nicely gotten up advertising copy of his work reproduced in a school journal. If he does banks, why shouldn't he publish in a periodical that reaches the different banks throughout the country, and as said above, pay for such advertising.

There is today a certain class of advertising that is adopted by some Architects which is not to the best advantage of the Architect and is contrary to the idea that the Architect wants to keep his work a profession. I speak of the advertising of a concern who has furnished an Architect with a certain type of material, and the manufacturer of that material secures from the Architect a photograph of the building completed and publishes in some journal throughout the country, along with a large photograph of their drawing of the product that they are advertising. The Architect has no control over this advertisement and it may be good copy and it may be bad. The main object of advertising is to keep the name of the product you are selling or the service you are giving, before the General Public's eye and the advertising in an architectural magazine which does, on the average, not get before the eyes of the General Public, usually results in only criticism by fellow members in his profession of that particular building. Therefore, I say that there is a large field through which the Architect can build up his business if the proper sort of copy is written so that the name of the Architect is kept before, and becomes known to the General Public.

Summing up, it seems to the writer that the average Architect should do his work in the same old way, but take advantage of the new methods that are available due to the natural progress of time, as time waits for no one.

By Arthur McArthur, General Manager for Albert C. Martin, Architect, Los Angeles, Cal.

SOME DATA in connection with the plan of our office organization are given below.

The Architect:—The architect of today, to better serve his clients, surrounds himself with an organization of individuals particularly qualified in each department and, in order that he may be free to give his attention to any one phase or the other as problems arise, he places the direct responsibility for the unification and direction of the whole in the hands of a General Manager—yes, and for the further reason that he must be able to absent himself at any time without a gap in the smooth procedure, so that he may assume that most important of all responsibilities—keeping the client happy.

The General Manager:—Here is the clearing house through which all the wishes of the client are transmitted to the various departments through to the finished product. The architect gives all his instructions to him and it is his responsibility to see that the ball does not fall between the fielders. Memoranda are written to department heads on a form pad which has a carbon copy retained and placed into a file a sufficient time ahead so that it will "bob up" again to see that it has been attended to. He endeavors to personally have all conferences with clients, particularly during the formation of the scheme—but the person whose department is affected in the matter in hand is always present at this conference, thus getting him into the spirit of the problem and getting the client the best advice. Copies of all conference reports are made on a form for the purpose and sent to the client and to all department heads concerned.

No information is given to an individual in a department without the knowledge of his chief.

Twice a week he submits to the Architect a resume of the vital points on each job in whatever stage it may be.

The Chief Designer:—For each preliminary sketch he receives a work sheet on a printed form, stating the nature of project, the owner, by whom the information was given, and by whom received, and the details of the requirements. All preliminaries, whether of a building involving ornamental design, or an industrial proposition, go through this department.

As the design is developed into working drawings, he makes it his business to see that his ideas are properly developed, and inspects shop

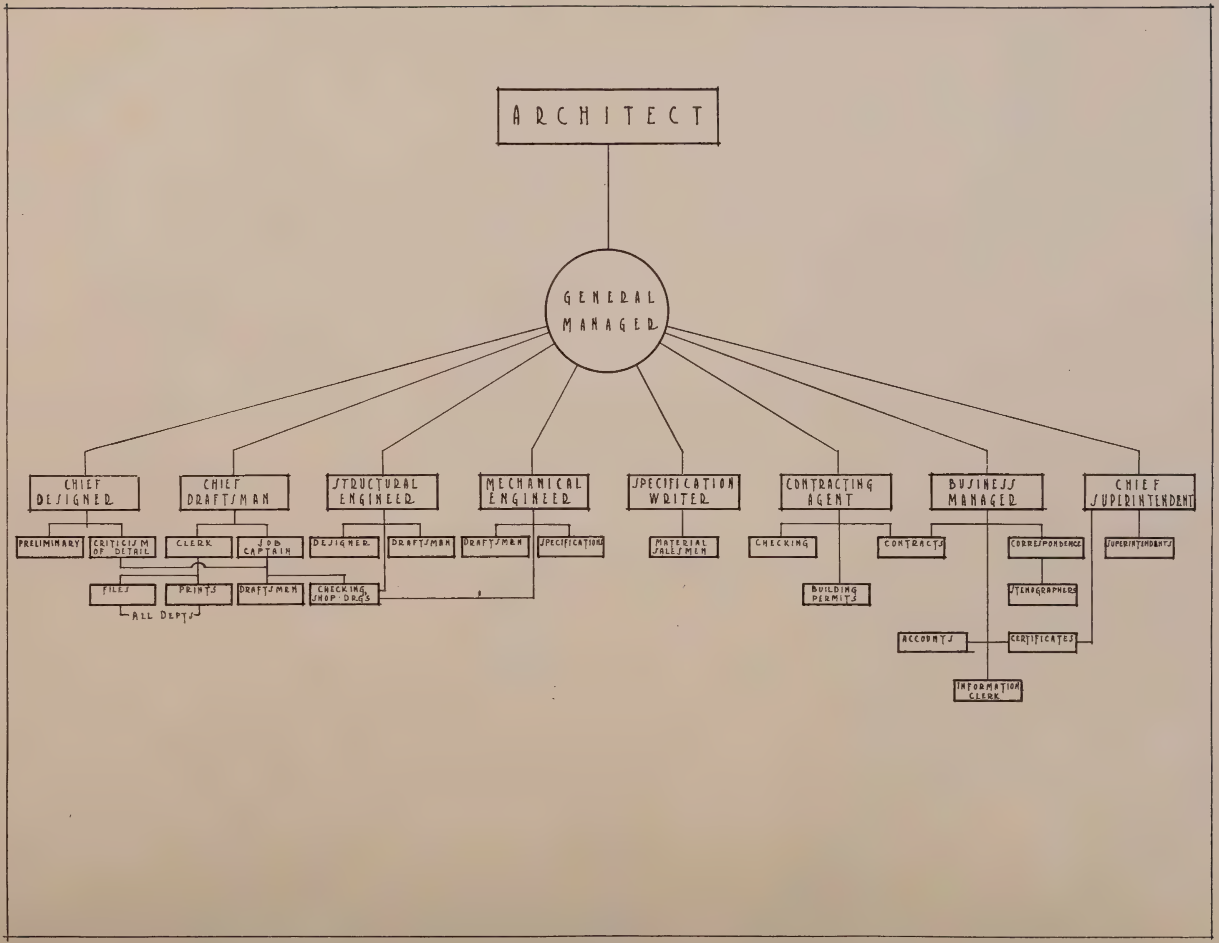


Diagram of Office Organization Illustrating the Contribution by Arthur McArthur of the Office of Albert C. Martin, Architect, Los Angeles. (See page 29.)

drawings and models of work involving design.

The Chief Draftsman (Architectural):—Under this man is a job captain who is responsible for the completion of the drawings and for the men under him. He is to co-operate with the structural, mechanical and specification departments.

Each job has a work book in which is placed the work sheet and all subsequent memos, conference reports, notes, measurements, etc.

This department is responsible for the files of all drawings and the ordering and issuing of prints in any department, and records are kept of these, as well as the receipt and return of all shop drawings. Shop drawings are checked by the job captain or the engineering department to which it relates.

Before a job is started, a schedule is made of all drawings that will be required and as they are drawn and traced a check is made so that a glance at this sheet will indicate the progress of the job.

The job captain keeps a memo pad for notes of special conditions to refer to the specification department.

Chief Engineer (Structural):—All engineering is handled in the office and all work is fully detailed and scheduled so there is no guess work.

This department consults with the preliminary department as to spacing of columns and other structural features, so as to insure an economical design —and to avoid changes when working plans are started.

Mechanical Engineer:—Here again we control this portion of the design under our own wing so that its provisions are anticipated early enough to not disrupt a design after it has matured.

This man also visits the job during its erection to give the outside department the benefit of his technical knowledge in making sure that the proper installation is assured.

Specifications:—We regard specifications as an important document with a definite purpose, and not a necessary evil which must in the eleventh hour be rushed through to accompany the plans "to the satisfaction of the architect."

An effort is made to avoid duplication of information on plans and specifications; the plans to show disposition of materials and the specifications to define quality.

This man has the interviewing of material salesmen, and in order to conserve his time, the time of receiving these men is limited to a definite hour each day. They are a part of the architect's education and they must be heard—but they can take his entire time if he will allow it.

A salesman who tells his story briefly and keeps his cigars in his pocket makes good progress with us.

Contracting Agent:—Here is a busy man who assumes a variety of duties and we scarcely know what his official title should be, but he is so busy that he doesn't care.

His chief responsibility is the taking of bids and the preparation of the material upon which the contract is drawn.

In order that he may intelligently answer the questions that the contractors may raise during the course of bidding, he does the checking of the plans and specifications—and let it be emphasized that no plan and specification form the basis for a contract until they have been checked. In order that there be no delay, this is done while the job is being figured, and any revisions or adjustments are taken care of at the time the contract is drawn.

He has the issuing of all orders for changes after work is under construction. These orders and all contracts are signed either by the architect or the general manager.

He has also the relations with the various building departments under whose jurisdiction the work is built. In addition to submitting the final drawings for permit, he also submits the preliminary sketches before working plans are started, thus making sure that no radical changes will be required after the plans are finished.

Business Manager:—This department, slighted by many offices, is a well organized and definite cog in our machinery. Here all mail and deliveries are received and stamped with a form which bears the initials of all department heads. It is all referred to the general manager who passes it on, checking the initials of all department heads who are affected thereby—and noting the one who will finally dispose of it by marking with a stamp "dictate reply" or "note and return."

All replies again pass over the desk of the General Manager and all letters that are sent to file are either marked for permanent filing or dated ahead when they should again receive attention and placed in the "suspense file," from which they automatically "bob up" at the proper time and can be forgotten in the interim.

This department prepares the legal document from the material supplied by our contracting agent and sees to its signing.

Here is handled all office accounting, statements of financial conditions, issuing of certificates for payment to contractors after they are approved by the Chief Superintendent.

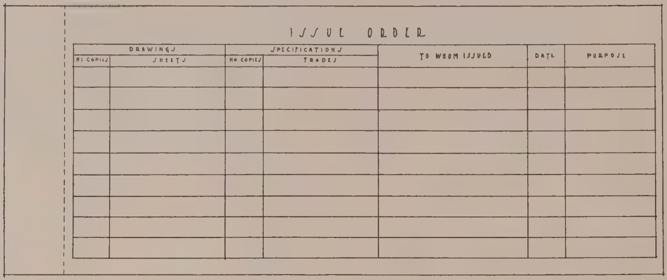
Here is the contact with the outside, both in person and by phone, and we stress the importance of a courteous reception and the assurance that all receive satisfaction and if the party on whom they are calling is out, to endeavor to have them taken care of by another member of the staff.

The General Superintendent:—The last link in our service to the client is superintendence, and we make it a real service and not a mechanical visitation to fulfill the contract.

Daily progress reports are made by the Superintendent on the job to his chief who in turn submits a semiweekly progress report to the General Manager, showing the high spots.

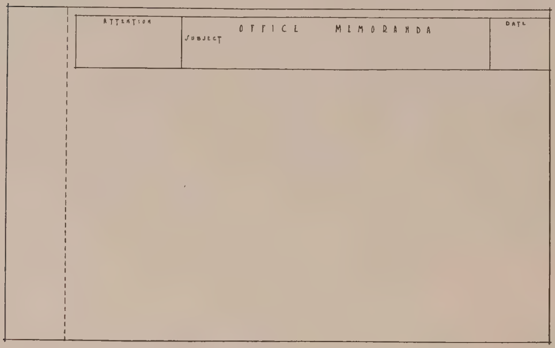
We feel this department is the eyes of the office and the fellow who finds our faults, and it is his business to apprise us of errors in plans and specifications, and we put it in the "don't book" so that we will not repeat the same error on the next job.

The draftsman sees things in terms of lines and the specification man listens to the tales of sales-



ISSUE ORDER

DRAWINGS		SPECIFICATIONS		TO WHOM ISSUED	DATE	PURPOSE
No. COPIES	SHEETS	No COPIES	TRADES			

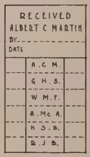


OFFICE MEMORANDA

ATTENTION

SUBJECT

DATE



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ALBERT C MARTIN
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	G. H. S.	
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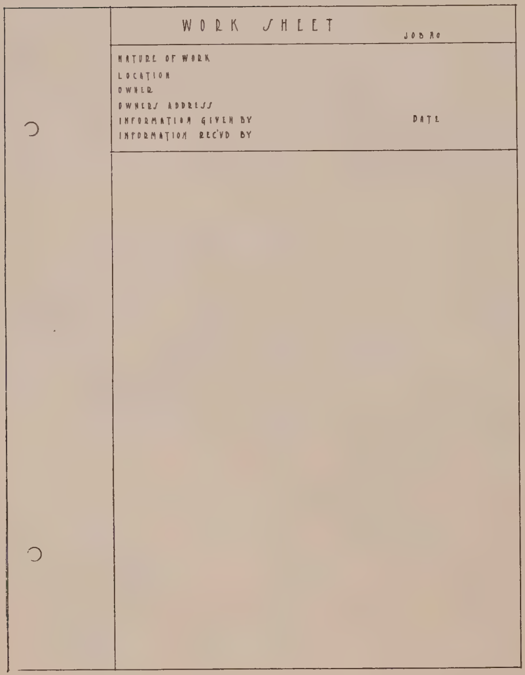
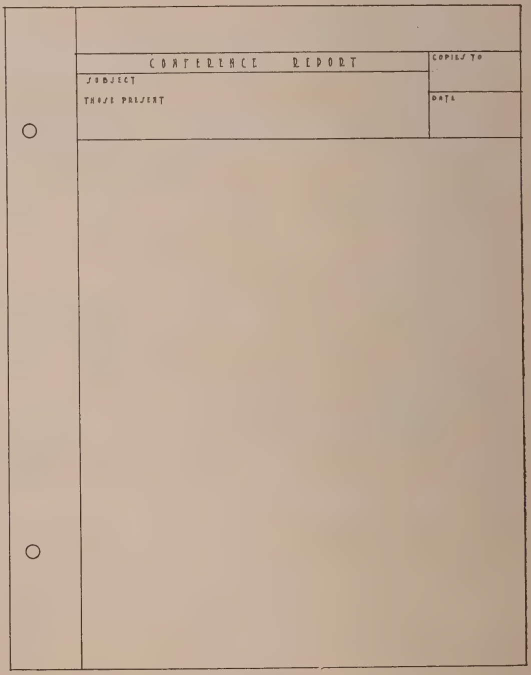


WORK SHEET

JOB NO

NATURE OF WORK
LOCATION
OWNER
OWNERS ADDRESS
INFORMATION GIVEN BY DATE
INFORMATION REC'VD BY



CONFERENCE REPORT

SUBJECT
THOSE PRESENT

COPIES TO
DATE

Forms Illustrating Contribution on Page 29 by Arthur McArthur of the Office of Albert C. Martin, Los Angeles.

men, but this man sees results and keeps us awake.

Co-operation:—This is the big point that we strive for and we do all possible to encourage a "pull together." At the beginning of each day, the chief draftsman and chief engineer meet with the general manager for a few minutes to discuss what was "killed" yesterday and what is on for today. Twice a week they bring a written memo of the conditions of all jobs on the boards.

Every two weeks is held a general "directors' meeting" of all department heads where ideas for the improvement of the organization are discussed, and where each may tell the other fellow where he can better co-operate with him.

Publicity:—We consider a satisfied client our best advertiser and this point is stressed throughout the entire organization—a beautiful picture means nothing if it is executed with a leaky roof or a damp basement, or finished two months too late.

In short, we are making an earnest effort to disprove the accusation that the architect is an impractical dreamer and a painter of pictures; still retaining, however, a practical expression of the beautiful picture.

By W. S. Parker, of the Office of R. Clipston Sturgis, Architect, Boston, Mass.

THE following forms are used in our office: (A) Blue card to accompany drawings sent out. (B) White card as office record of above until blue card is returned receipted. (C) Time sheet used for recording the time of each draftsman for each week. (D) Application for payment. (E) Weekly report of progress of work for use by clerk of the works. (F) Order form for changes in the contract. (G) Sheet for entering final details of each order, to which are affixed the various original estimates bearing on the order as finally drawn. (H) Form of certificate and attached stub. (I) Monthly statement to cover office charges to client. (J) Card for recording preliminary estimates. (K) Card for recording the original and final contract costs. (L) Card for recording the original and final figures on commissions and incidentals.

Perhaps the following brief explanation of the use of these forms in some cases may be of interest:

Exhibit (A). We find the blue card sent out with drawings, with a one cent stamp attached, and in almost every case actually returned by the Owner or the Contractor receipted, a very valuable record, especially when any question arises as to whether or not documents have been received at the proper time.

(B) Necessary as a temporary office record.

(C) Time is kept by a stenographer who gets each day from each draftsman a record of time spent and the job involved. The form refers to the number of a drawing. This subdivision of the time we do not now keep, as it involved more expense than the record was worth.

(D) Application for payment is sent in quantity to the contractors and used by them in duplicate when we so desire, and in such cases the duplicate copy is sent to the owner with the certificate for payment, so that he has the full details in front of him. It should be noted that the first column, entitled "Classification of Contract to Date" must be complete to date including all orders issued up to the time of the application. The second column indicates the value of work done to the date of the application, and the right hand column, being a copy of the second column in the previous monthly statement, gives a ready comparison to show actual progress in each item.

(E) Clerk of the works' report blank is self-explanatory.

(F) Order Form. We believe the summary at the bottom of the order, giving the amount of the original contract, total additions and total deductions, and the contract to date, is an essential feature of any order form, as it confirms the total amount of the contract to date on each order and makes it unnecessary for the owner to refer to other documents for this information.

(G) This record of the order we find of great use in later reference to orders. Frequently a number of more or less complicated letters and estimates are involved in an order as finally determined. This sheet permits a clean summary of the order to be made for ready reference, and the appended documents give the actual confirmation.

(H) Certificate form—self-explanatory.

(I) Monthly Statement. This is based upon the practice of this office, which almost entirely does its work under the method of a fixed fee plus costs, and in some cases with a guaranteed outside limit for certain items.

(J), (K) and (L) are self-explanatory.

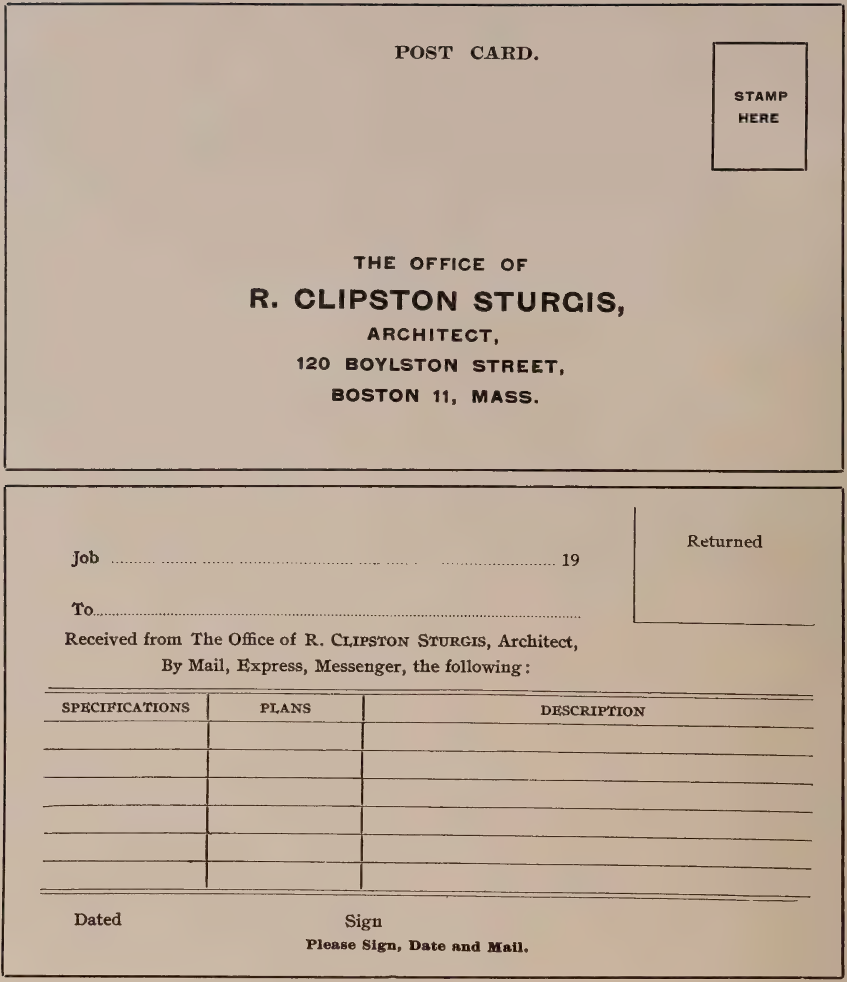
By Harold B. Brady, Architect, Elizabeth, N. J.

THE articles recently published in PENCIL POINTS concerning the relationship between draftsmen and employers, have been read with a great deal of interest and I feel that there is need that serious thought be given this question by all parties concerned.

The question of *efficiency* has been discussed from all viewpoints for a number of years back, but from personal observation and experience, I feel that a great many fellow architects have, in quest of efficiency, become blind to the fact that so-called efficiency without proper co-operation usually proves in the end very costly.

We will have to admit that in order to obtain the best results, we have to depend to a certain extent on each individual member of our organization giving us the best services possible for that particular work. In order to accomplish this, each individual must, of course, be governed by two very essential factors: First—he must be interested in the work he has to do and, second—he must feel that his efforts are being appreciated and that he is all the time working up to greater things. When this appreciation is not shown, the organization naturally becomes a machine and the quality of the work produced naturally lacks that individuality and feeling for which we are striving.

With the above ideas in mind, I have built up my organization and the results have borne out my



POST CARD.

STAMP
HERE

THE OFFICE OF
R. CLIPSTON STURGIS,
ARCHITECT,
120 BOYLSTON STREET,
BOSTON 11, MASS.

Returned

Job 19

To..

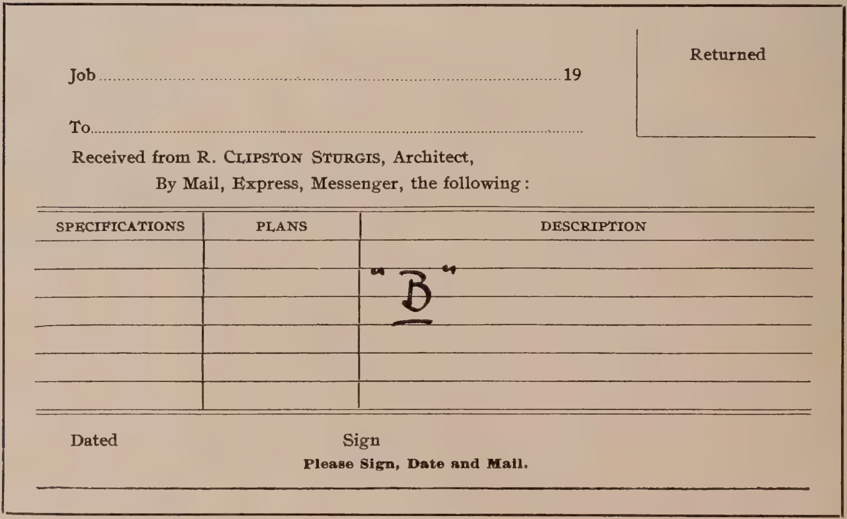
Received from The Office of R. Clipston Sturgis, Architect,
By Mail, Express, Messenger, the following:

SPECIFICATIONS	PLANS	DESCRIPTION

Dated Sign

Please Sign, Date and Mail.

Face and Reverse of Form "A"



Returned

Job 19

To..

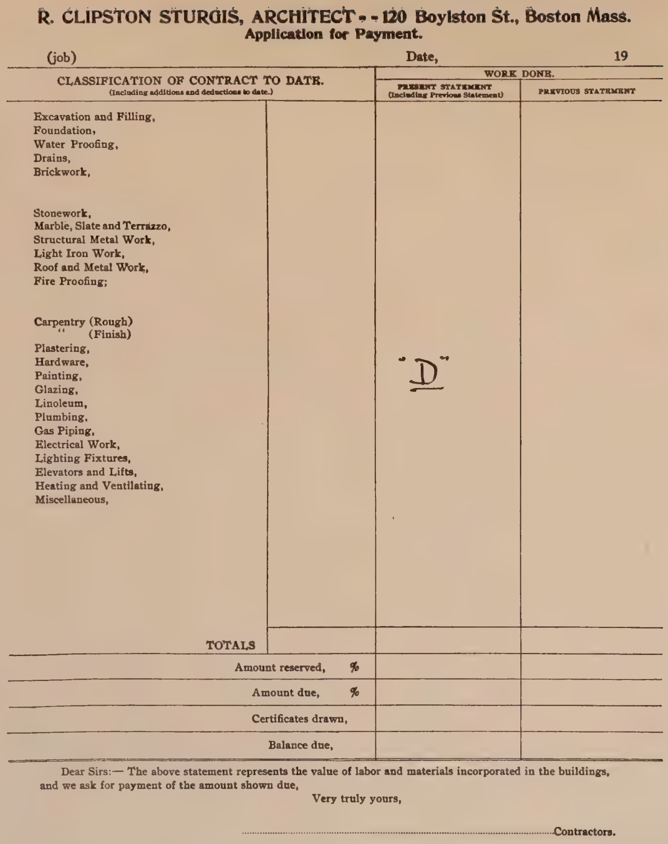
Received from R. Clipston Sturgis, Architect,
By Mail, Express, Messenger, the following:

SPECIFICATIONS	PLANS	DESCRIPTION
		"B"

Dated Sign

Please Sign, Date and Mail.

Form "B"
Forms Used in the Office of R. Clipston Sturgis, Boston, Mass.



R. CLIPSTON STURGIS, ARCHITECT - - 120 Boylston St., Boston Mass.
Application for Payment.

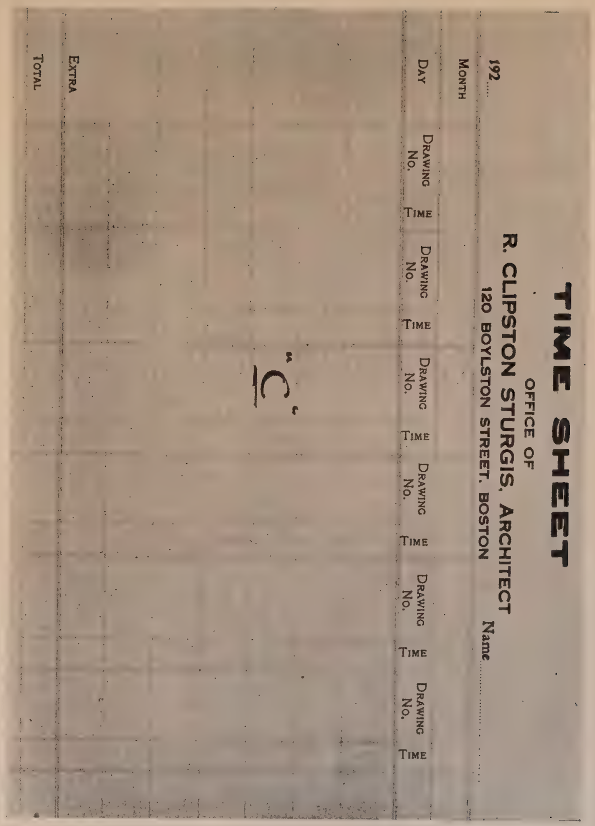
(job) Date, 19

CLASSIFICATION OF CONTRACT TO DATE. (Including additions and deductions to date.)		WORK DONE.	
		PRESENT STATEMENT (Including Previous Statement)	PREVIOUS STATEMENT
Excavation and Filling, Foundation, Water Proofing, Drains, Brickwork, Stonework, Marble, Slate and Terrazzo, Structural Metal Work, Light Iron Work, Roof and Metal Work, Fire Proofing; Carpentry (Rough) " (Finish) Plastering, Hardware, Painting, Glazing, Linoleum, Plumbing, Gas Piping, Electrical Work, Lighting Fixtures, Elevators and Lifts, Heating and Ventilating, Miscellaneous,		"D"	
TOTALS			
Amount reserved, %			
Amount due, %			
Certificates drawn,			
Balance due,			

Dear Sirs:— The above statement represents the value of labor and materials incorporated in the buildings, and we ask for payment of the amount shown due,

Very truly yours,

..........Contractors.



TIME SHEET
OFFICE OF
R. CLIPSTON STURGIS, ARCHITECT
120 BOYLSTON STREET, BOSTON

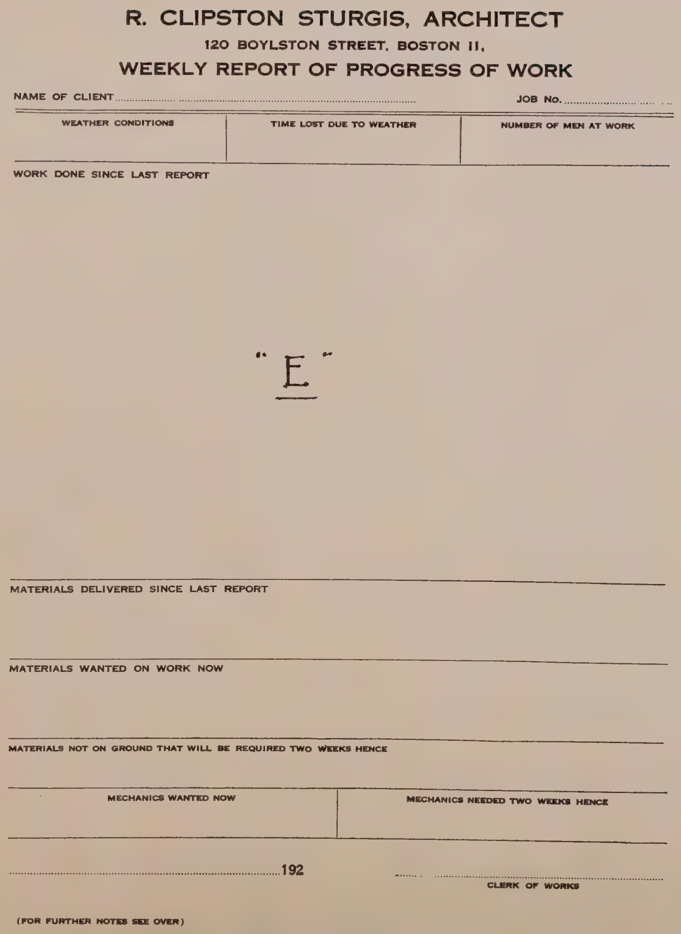
192..... Name..........

MONTH												
DAY	DRAWING No.	TIME	DRAWING No.	TIME	DRAWING No.	TIME	DRAWING No.	TIME	DRAWING No.	TIME	DRAWING No.	TIME
					"C"							
EXTRA												
TOTAL												

Form "D" Size 8½ x 11 in.

Form "C" Size 7¾ x 5⅜ in.

Forms Used in the Office of R. Clipston Sturgis, Architect, Boston, Mass.



R. CLIPSTON STURGIS, ARCHITECT
120 BOYLSTON STREET, BOSTON 11,
WEEKLY REPORT OF PROGRESS OF WORK

NAME OF CLIENT .... JOB No. ....

WEATHER CONDITIONS	TIME LOST DUE TO WEATHER	NUMBER OF MEN AT WORK

WORK DONE SINCE LAST REPORT

"E"

MATERIALS DELIVERED SINCE LAST REPORT

MATERIALS WANTED ON WORK NOW

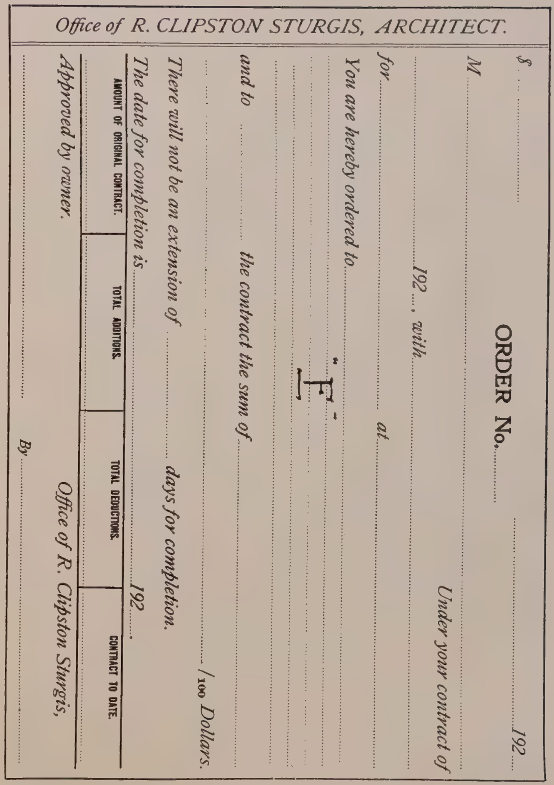
MATERIALS NOT ON GROUND THAT WILL BE REQUIRED TWO WEEKS HENCE

MECHANICS WANTED NOW	MECHANICS NEEDED TWO WEEKS HENCE

....192 ....
CLERK OF WORKS

(FOR FURTHER NOTES SEE OVER)

Form "E", Size 8½ x 11½ in.



Office of R. CLIPSTON STURGIS, ARCHITECT.

$ ....192.....

ORDER No...............

M..

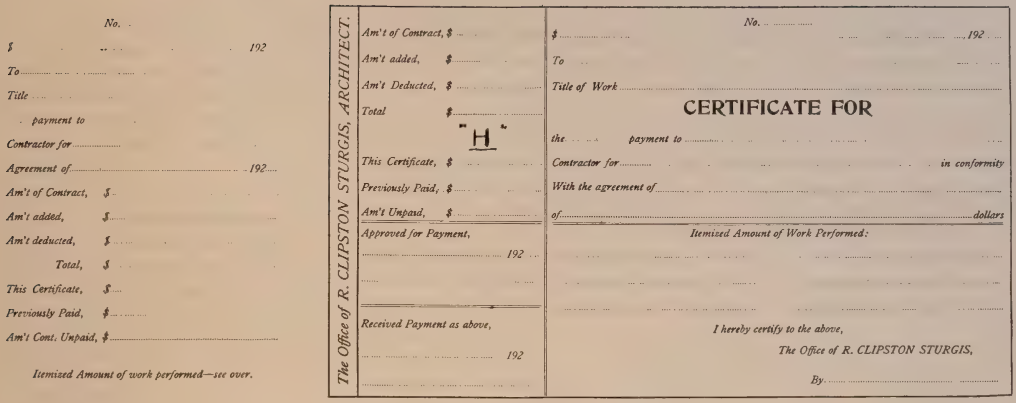
Under your contract of
....192...., with..
for.. at..
You are hereby ordered to..
"F"
....
....
and to .... the contract the sum of..
.... /100 Dollars.
There will not be an extension of .... days for completion.
The date for completion is..192.......

AMOUNT OF ORIGINAL CONTRACT.	TOTAL ADDITIONS.	TOTAL DEDUCTIONS.	CONTRACT TO DATE.

Approved by owner. Office of R. Clipston Sturgis,
.... By..

Form "F", Size 5¾ x 7¾ in.

Forms Used in the Office of R. Clipston Sturgis, Architect, Boston, Mass.



No.

$ 192

To

Title

payment to

Contractor for

Agreement of 192

Am't of Contract, $

Am't added, $

Am't deducted, $

Total, $

This Certificate, $

Previously Paid, $

Am't Cont. Unpaid, $

Itemized Amount of work performed—see over.

The Office of R. CLIPSTON STURGIS, ARCHITECT.

Am't of Contract, $

Am't added, $

Am't Deducted, $

Total $

"H"

This Certificate, $

Previously Paid, $

Am't Unpaid, $

Approved for Payment,

192

Received Payment as above,

192

No.

$ 192

To

Title of Work

CERTIFICATE FOR

the payment to

Contractor for in conformity

With the agreement of

of dollars

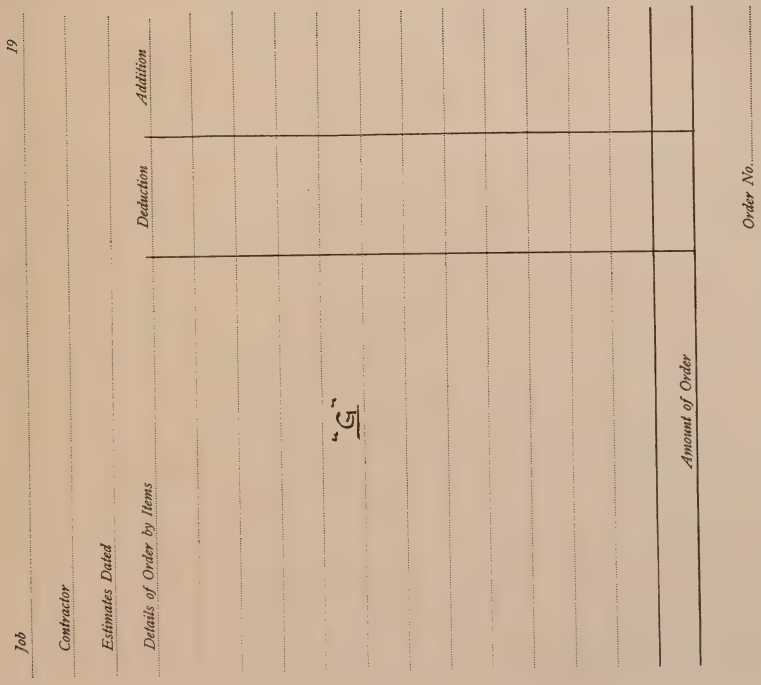
Itemized Amount of Work Performed:

I hereby certify to the above,

The Office of R. CLIPSTON STURGIS,

By

Form "H", Size 5¼ x 3¾ in.



Job 19

Contractor

Estimates Dated

Details of Order by Items

Deduction

Addition

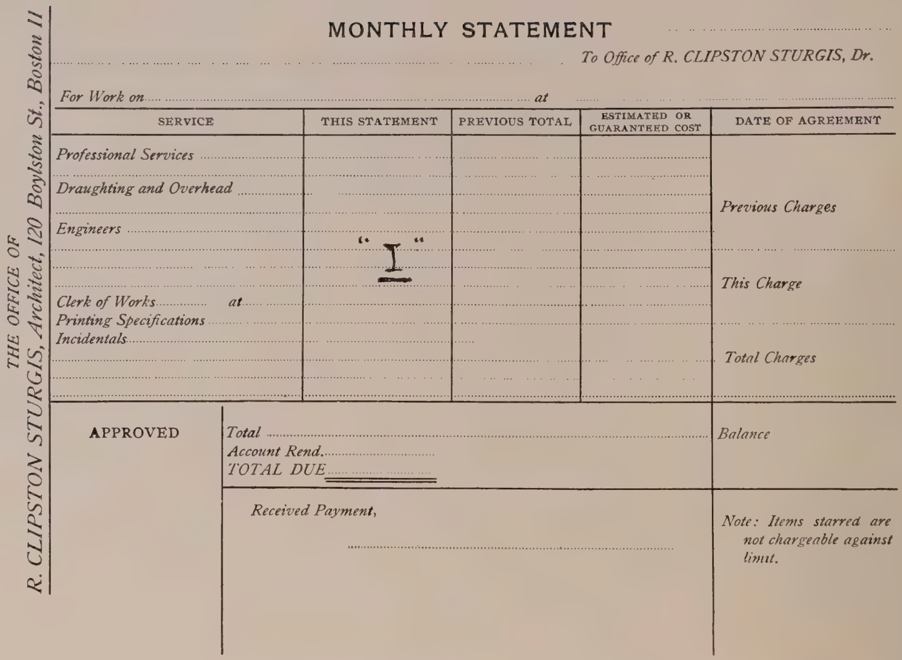
"G"

Amount of Order

Order No.

Form "G", Size 8½ x 11 in.

Forms Used in the Office of R. Clipston Sturgis, Architect, Boston, Mass.



THE OFFICE OF
R. CLIPSTON STURGIS, Architect, 120 Boylston St., Boston 11

MONTHLY STATEMENT

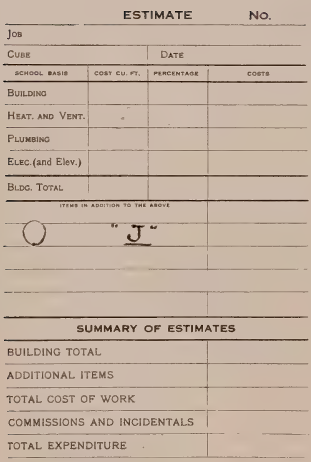
To Office of R. CLIPSTON STURGIS, Dr.

For Work on .... at ....

SERVICE	THIS STATEMENT	PREVIOUS TOTAL	ESTIMATED OR GUARANTEED COST	DATE OF AGREEMENT
Professional Services				
Draughting and Overhead				Previous Charges
Engineers				
	"I"			This Charge
Clerk of Works .... at				
Printing Specifications				
Incidentals				Total Charges

APPROVED	Total Account Rend. TOTAL DUE	Balance
	Received Payment,	Note: Items starred are not chargeable against limit.

Form "I"
Size 6⅛ in. x 8¼ in.

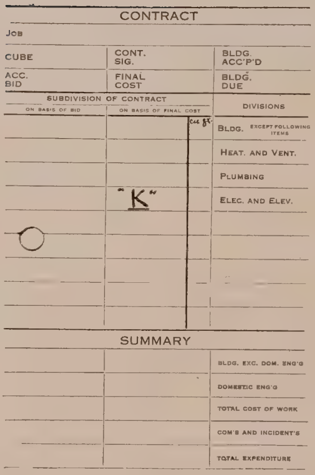


ESTIMATE No.

Job			
Cube		Date	
SCHOOL BASIS	COST CU. FT.	PERCENTAGE	COSTS
Building			
Heat. and Vent.			
Plumbing			
Elec. (and Elev.)			
Bldg. Total			
ITEMS IN ADDITION TO THE ABOVE			
"J"			

SUMMARY OF ESTIMATES

BUILDING TOTAL	
ADDITIONAL ITEMS	
TOTAL COST OF WORK	
COMMISSIONS AND INCIDENTALS	
TOTAL EXPENDITURE	



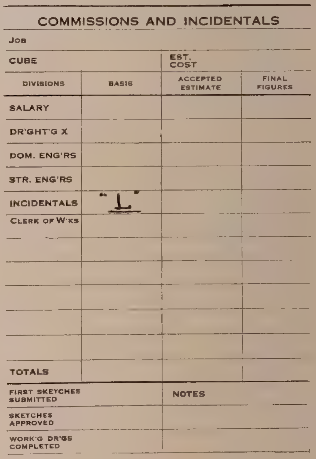
CONTRACT

Job		
CUBE	CONT. SIG.	BLDG. ACC'P'D
ACC. BID	FINAL COST	BLDG. DUE

SUBDIVISION OF CONTRACT			
ON BASIS OF BID	ON BASIS OF FINAL COST	cu ft.	DIVISIONS
			Bldg. EXCEPT FOLLOWING ITEMS
			Heat. and Vent.
			Plumbing
	"K"		Elec. and Elev.

SUMMARY

		BLDG. EXC. DOM. ENG'G
		DOMESTIC ENG'G
		TOTAL COST OF WORK
		COM'S AND INCIDENT'S
		TOTAL EXPENDITURE



COMMISSIONS AND INCIDENTALS

Job			
CUBE		EST. COST	
DIVISIONS	BASIS	ACCEPTED ESTIMATE	FINAL FIGURES
SALARY			
DR'GHT'G X			
DOM. ENG'RS			
STR. ENG'RS			
INCIDENTALS	"L"		
Clerk of W'ks			
TOTALS			

FIRST SKETCHES SUBMITTED	NOTES
SKETCHES APPROVED	
WORK'G DR'GS COMPLETED	

Forms "J", "K" and "L". Size of Cards 4 in. x 6 in.
Forms Used in the Office of R. Clipston Sturgis, Architect, Boston, Mass.

theories to the highest degree. In selecting men to fill any vacancies which occur, I endeavor first to select men who are fully qualified and competent to fill a position, after which the matter of salary is adjusted, which is perfectly satisfactory to both sides. This tends to make the men perfectly satisfied with their working conditions and, therefore, anxious to make good. The result has been that at all times I find the men taking the greatest interest in their work and I can always depend on having work turned out promptly, even though it necessitates working overtime in special cases.

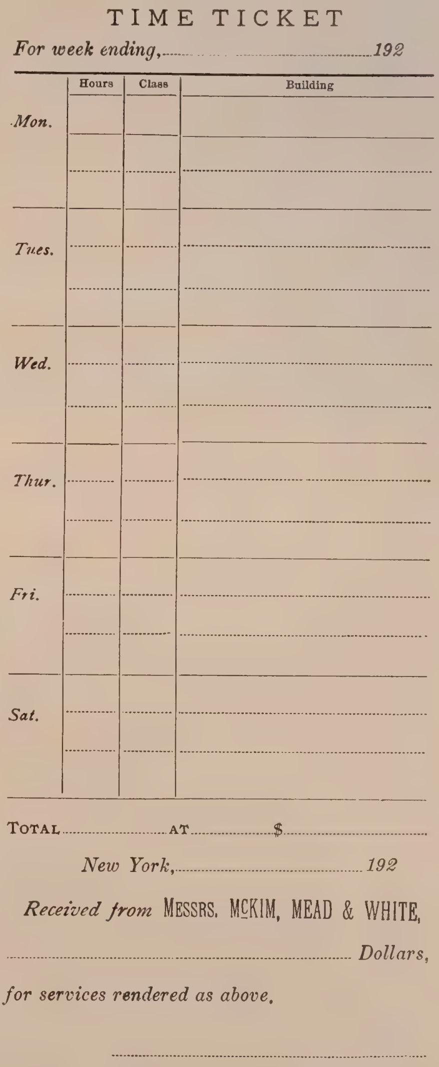
Regarding periods of depression which sometimes occur, I find that the law of averages always prevails, as the men who can ease up in their work once in awhile are always prepared to work doubly hard when rush period is on and I find this much more economical than to lay off my force and be obliged to break in a new force for the new work that comes in.

Summing up the situation in a few words, I feel that I have obtained the greatest efficiency possible, as this plan is most congenial and satisfactory both to my men and to myself.

By McKim, Mead and White, Architects, New York City.

OUR office is run on a very simple plan. To begin with, we have no head draftsman. Each man is directly responsible for his own work, under the supervision of the members of the firm. The jobs are apportioned by common consent among the five members of the firm, who in turn allot the work to one of the several senior draftsmen, who makes all the preliminary sketches, etc., under the direct supervision of one of the firm members. Our senior draftsmen are usually employed with more than one job, as all of our drawings are completely worked up in the drafting room. The mechanical and structural engineering is sometimes done outside the office in consultation with our own engineers. The heating, ventilating and lighting are usually done by the consulting engineers. Also, we very often employ a special artist to make the final renderings, although these are usually made in the office. When all the drawings are complete they are turned over to the specification department, and after this they are ready to submit to the contractors. The work is given over to several firms for estimating and plenty of time is allowed the contractors to study the drawings in order that the final estimate may be carefully worked out by the date set for submission of all bids. We believe that this is important in securing the best results as when the contractor is hurried he is very apt to submit a considerably higher estimate to cover future contingencies. The bids are submitted in sealed envelopes, opened by the members of the firm, and the contract let to the lowest bidder. Usually the general contractor takes care of all the sub-contractors, but in some instances we let the sub-contracts to other firms and this, of course, necessitates another contract. The work as a general rule goes on more smoothly when there is one general contractor overseeing all the sub-contractors.

We use two general contract forms; one our own and the other the regular American Institute of Architects form. All additions or deductions to these contracts are authorized in writing. We also use a short form contract for jobs of less than $1,000.00 and for any additions to previous work,



TIME TICKET

For week ending,..............................*192*

	Hours	Class	Building
Mon.			
Tues.			
Wed.			
Thur.			
Fri.			
Sat.			

TOTAL..................AT..................$..................

New York,..............................*192*

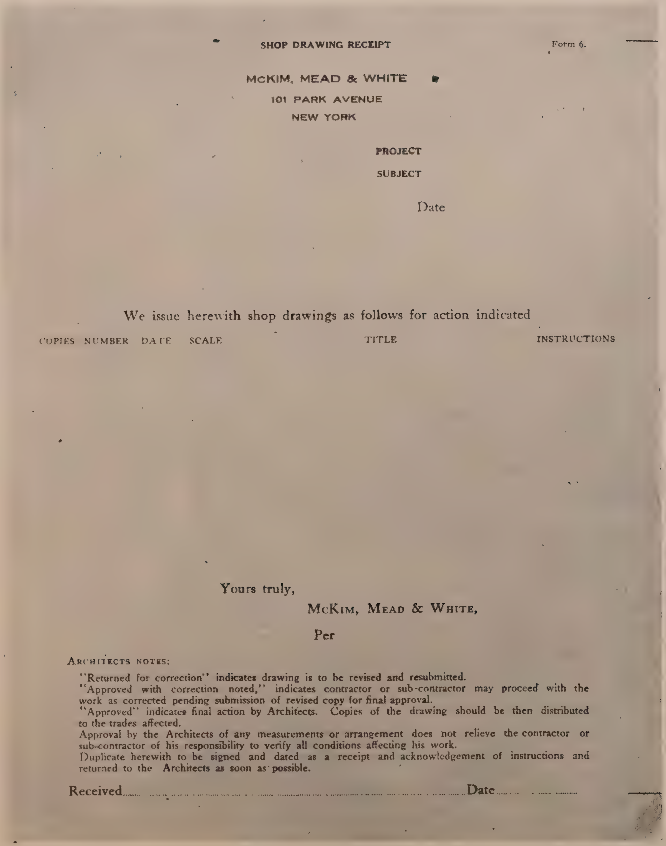
Received from MESSRS. MCKIM, MEAD & WHITE,

....*Dollars,*

for services rendered as above.

....

Time Ticket Used by McKim, Mead & White, New York. Size 4½ x 9½ in.



SHOP DRAWING RECEIPT

Form 6.

McKIM, MEAD & WHITE
101 PARK AVENUE
NEW YORK

PROJECT
SUBJECT

Date

We issue herewith shop drawings as follows for action indicated

COPIES	NUMBER	DATE	SCALE	TITLE	INSTRUCTIONS

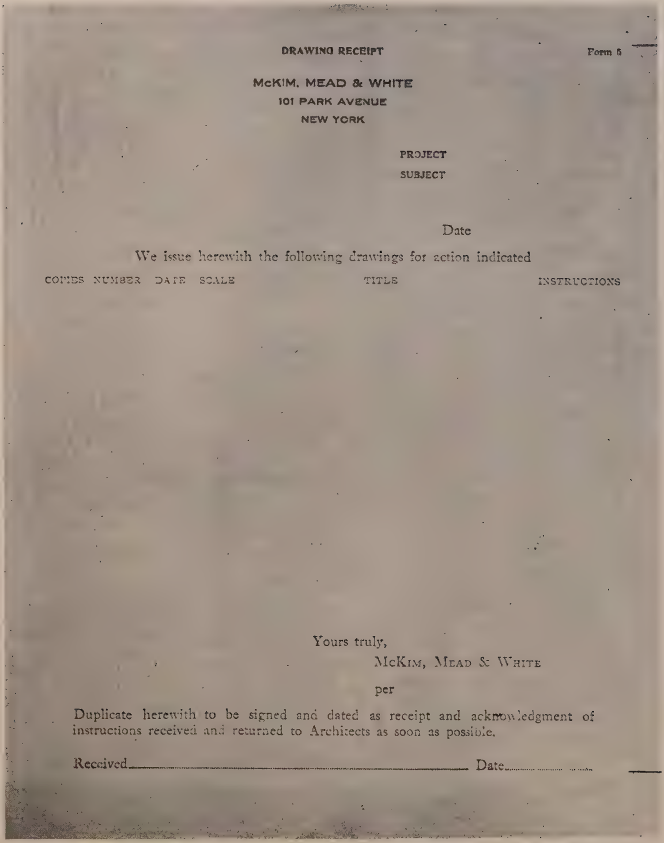
Yours truly,
McKim, Mead & White,
Per

Architects notes:

"Returned for correction" indicates drawing is to be revised and resubmitted.
"Approved with correction noted," indicates contractor or sub-contractor may proceed with the work as corrected pending submission of revised copy for final approval.
"Approved" indicates final action by Architects. Copies of the drawing should be then distributed to the trades affected.
Approval by the Architects of any measurements or arrangement does not relieve the contractor or sub-contractor of his responsibility to verify all conditions affecting his work.
Duplicate herewith to be signed and dated as a receipt and acknowledgement of instructions and returned to the Architects as soon as possible.

Received...Date...........................

Size 8 *in.* x 10½ *in.*



DRAWING RECEIPT

Form 5

McKIM, MEAD & WHITE
101 PARK AVENUE
NEW YORK

PROJECT
SUBJECT

Date

We issue herewith the following drawings for action indicated

COPIES	NUMBER	DATE	SCALE	TITLE	INSTRUCTIONS

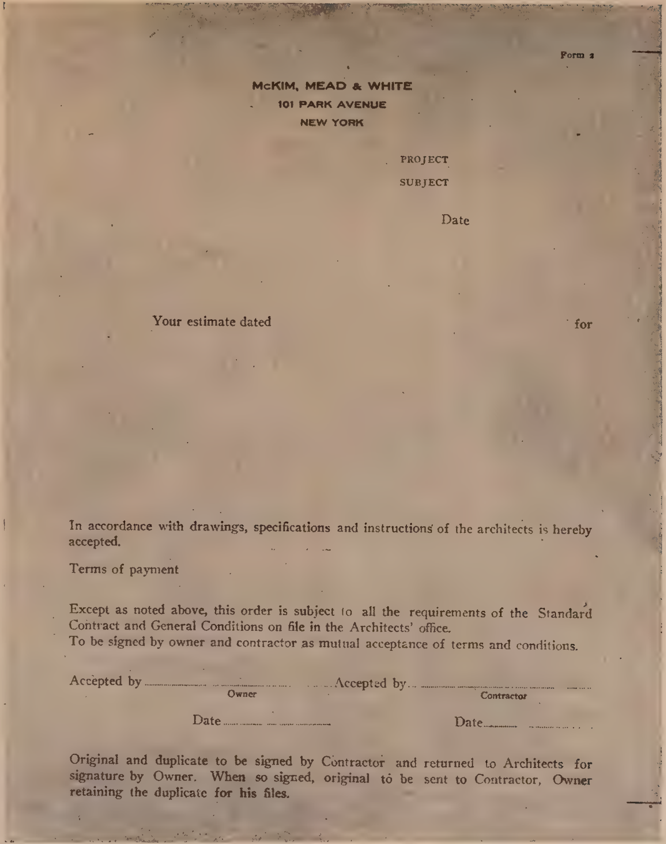
Yours truly,
McKim, Mead & White
per

Duplicate herewith to be signed and dated as receipt and acknowledgment of instructions received and returned to Architects as soon as possible.

Received________________________________ Date...........................

Size 8 *in.* x 10½ *in.*

Forms Used in the Office of McKim, Mead & White, Architects, New York.



Form 2

McKIM, MEAD & WHITE
101 PARK AVENUE
NEW YORK

PROJECT
SUBJECT

Date

Your estimate dated for

In accordance with drawings, specifications and instructions of the architects is hereby accepted.

Terms of payment

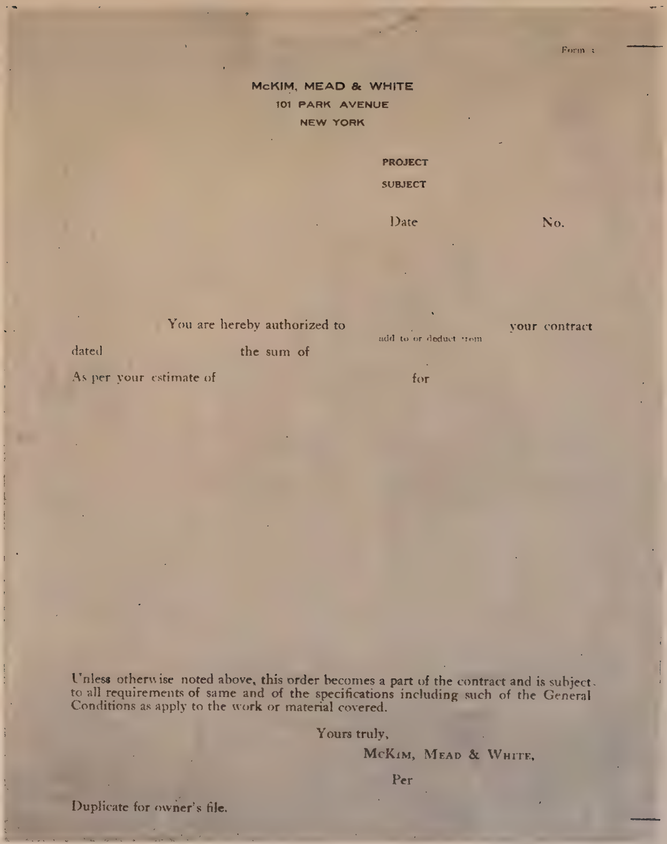
Except as noted above, this order is subject to all the requirements of the Standard Contract and General Conditions on file in the Architects' office.
To be signed by owner and contractor as mutual acceptance of terms and conditions.

Accepted by .... Owner   Accepted by .... Contractor

Date ....   Date ....

Original and duplicate to be signed by Contractor and returned to Architects for signature by Owner. When so signed, original to be sent to Contractor, Owner retaining the duplicate for his files.

Size 8 *in* x 10½ *in.*



Form 3

McKIM, MEAD & WHITE
101 PARK AVENUE
NEW YORK

PROJECT
SUBJECT

Date No.

You are hereby authorized to (add to or deduct from) your contract dated the sum of
As per your estimate of for

Unless otherwise noted above, this order becomes a part of the contract and is subject to all requirements of same and of the specifications including such of the General Conditions as apply to the work or material covered.

Yours truly,
McKim, Mead & White,
Per

Duplicate for owner's file.

Size 8 *in* x 10½ *in.*

Forms Used in the Office of McKim, Mead & White, Architects, New York.

in which case the short contract is added to the original and is subject to the same terms.

We have triplicate forms for our drawing receipts; two forms are sent out with the drawings—one to be retained for the files of the person to whom the drawings are delivered and the other to be signed and returned to us for our records. When the signed receipt is returned to us, the third sheet, which we have kept, is destroyed and the signed form filed. These forms are practically the same for both the working drawings and the shop drawings.

We have one general superintendent who oversees the construction. He has under him one or more assistant superintendents, who attend to certain jobs under the direct supervision of the general superintendent. If a job is not too large one of the senior draftsmen sometimes acts as superintendent.

In general, all the work may be divided into four classes: (a) the preliminary sketches, perspectives, renderings, etc.,—all the drawings that are made before authorization to go ahead with the job is received, (b) all the working drawings prepared for contractors' estimates, (c) the full size and miscellaneous details and (d) the checking and supervision.

The plans and sketches for each job are kept in steel drawers and the full size details are kept in a separate rack and catalogued in pigeon holes. When the job is completed the drawings are taken out of these drawers and tabulated and rolled together and put in a general filing room kept for this purpose.

By Charles H. Bauer, of the firm of Guilbert & Betelle, Architects, Newark, N. J.

THIS office conducts a general practice of architecture along the lines of commercial structures, such as schools, hotels, office buildings, banks, hospitals, etc. While the greater portion of our work consists of schools, we are organized to handle any type of building that is generally designed by architects.

We are now operating under three general divisions and each of these divisions is presided over by a member of the firm. These divisions are first the business department, second the design division, and third the supervision division. We find that this arrangement works very well and takes care of the fundamentals of our architectural practice, and all other divisions are secondary, and have been grouped under one of the above heads.

The business end of the office is under the control of Mr. Betelle, who is the guiding spirit in all three divisions. It is to him we look for the final analysis and settlement of the larger problems.

The business end of our office takes care of the following work:

The important work of obtaining new business and of interviewing clients so as to keep the organization going.

The necessary writing of business letters, and the handling of the problem of subdividing the office work among the various heads of departments.

Making out certificates of payment in consultation with the supervision department.

The accounting division of this department has been developed to a point where we know our cost of production, not merely at the end of the job, but we are able to check up as the work progresses. This department has arranged a card system pertaining to costs of buildings and their cubiture, so that we can make a very close estimate on the probable cost of new work.

The business department also takes care of the signing and filing of all contracts, and arranges for such matters as bonds and insurance.

The design division consists of a member of the firm, who has control of all matters of design, and the general operation of the drafting room from the preliminary sketches to the time of making the final details. We have approximately thirty draftsmen who do the real work of the office. They are not arranged into any particular groups, except that we try to balance the office by having them divided into designers, senior draftsmen and junior draftsmen. The senior draftsmen generally make the preliminary sketches and as far as possible we try to see that they follow this by making the working drawings, and very often the details of the same job. Due to the fact that our jobs are not all million dollar jobs, it is not always easy to arrange this so that it works as smoothly as we would like, but as far as possible we try to keep the same men on the job to its completion.

We have no special tricks in our drafting room that would be new to the general practice. We do not believe in making one man specialize to such an extent that he becomes unbalanced, but we try as far as possible to give everyone in the drafting room a chance to make sketches, working drawings and full size details, and very often we have the draftsmen check the specifications so that a man will become developed in all respects. This, we believe, is not only a help to our office, but also is giving general training to the men themselves.

Allied with the design division, we have the three following subdivisions: specifications, mechanical equipment, and structural design.

After our specifications have been written, they are, as a rule, checked in detail by the draftsman in charge of the job. We find that he is the person best fitted to pick up the minute details, which saves us endless trouble.

In our mechanical equipment division we have three men, one who supervises the department generally, and writes the specifications for the heating, plumbing and electric work. One of his assistants specializes in heating and the other in plumbing and electric work. We find this department is of great assistance, and until it was established we did not realize how valuable it would be to have this department actually in our office organization. We find that it not only helps to produce the drawings more quickly, but more accurately as well, because information can be obtained with the least possible trouble and delay.

Our structural design division consists of three men who give all the necessary data and also help in many ways with the details. This department, also, like the mechanical equipment department, has proven to be of great value by being actually within our organization.

The supervision department is under the direction of another member of the firm, who has three assistants besides the necessary help from time to time on special work.

The work of this department consists in seeing that the buildings are properly constructed in accordance with the plans and specifications, and this department checks all payments relating to building contracts so that the business department is prepared to issue certificates for payments. Samples of materials are approved by this department, consulting with the design and specification divisions.

This department not only takes care of the above work but is also a great help in attending school board meetings and representing the office, as men in this department frequently come in contact with the clients.

The men of the department are selected because of their experience in building, rather than drafting. They speak the language of the builder, and get better results than an office trained man.

By W. F. Anderson, of the Office of Grosvenor Atterbury, Architect, New York City.

THE man who has succeeded in his chosen profession, no matter in what line, is to be congratulated; and he usually is, provided that his ultimate standing in the community be attained by honorable means.

Each and every one of us has a personal definition of the word "Success." To me it means the attainment of a reasonable share of this world's goods, in so far as I may do so without sacrificing my own self respect or the esteem of my friends in this profession, and to gain the respect of the new client as well as maintaining friendly relations with the old.

Every architect has his own formula for the attainment of the successful practice which he hopes to establish, but I venture to state that in all of them the word "Service" has a large part. To show a few methods by which the service may be best rendered and the client be pleased is the purpose of this paper.

In the days of our forefathers the relations between the architect and his client were usually simple, direct and personal but, with the transformation in business methods, architectural practice has changed. No well informed client now expects that his architect will personally perform or oversee the many details entering into the completed building. He does, however, believe that he has the right to expect that the services, for which he pays, shall be rendered in the most efficient manner possible. To accomplish this requires unfailing co-operation on the part of all employees to this one end.

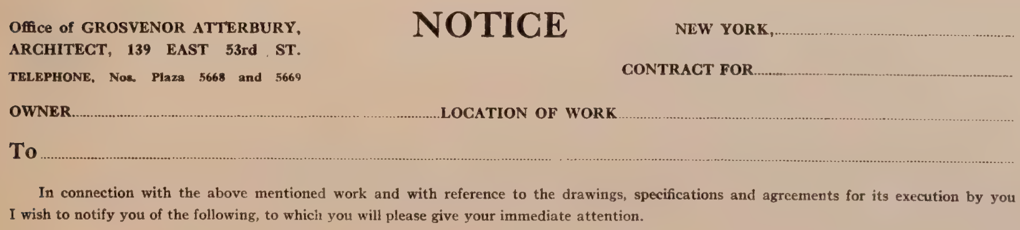
Here may I quote from John Drier on "The Secret of Success"—" 'The secret of success' is not a secret, nor is it something new. Nor is it something hard to secure. To become more successful, become more efficient. Do the little things better. Regard yourself as a maker and seller of service, and ever bend your thought and your energies toward the improvement of your products."

To render service in an efficient manner need not require an elaborate system of "red tape," but it does require that co-operation previously mentioned and such methods of keeping records and bookkeeping as the size of the practice justifies.

In this office printed forms are used, largely in the interest of time saving, but I would emphasize the value of making a written memorandum of all conferences with the client and instructions to the contractor. Such papers will often be of inestimable value.

Whether you elect to use printed forms to be filled out by hand or typewritten, or to have the entire record typewritten, the following will be found very useful in any office. In the latter case, however, the form used should always be the same.

1. Job Record Card. To show the owner's name, date of entry in office, classification of work (city or country), location, names of Outside Professional Assistants employed, names of contractors and their sub-contractors, total of contract price, total of cost to office, total fee, date of completion. Many other items of general record value may be added if size of card per-



Office of GROSVENOR ATTERBURY,
ARCHITECT, 139 EAST 53rd ST.
TELEPHONE, Nos. Plaza 5668 and 5669

NOTICE

NEW YORK,......................................

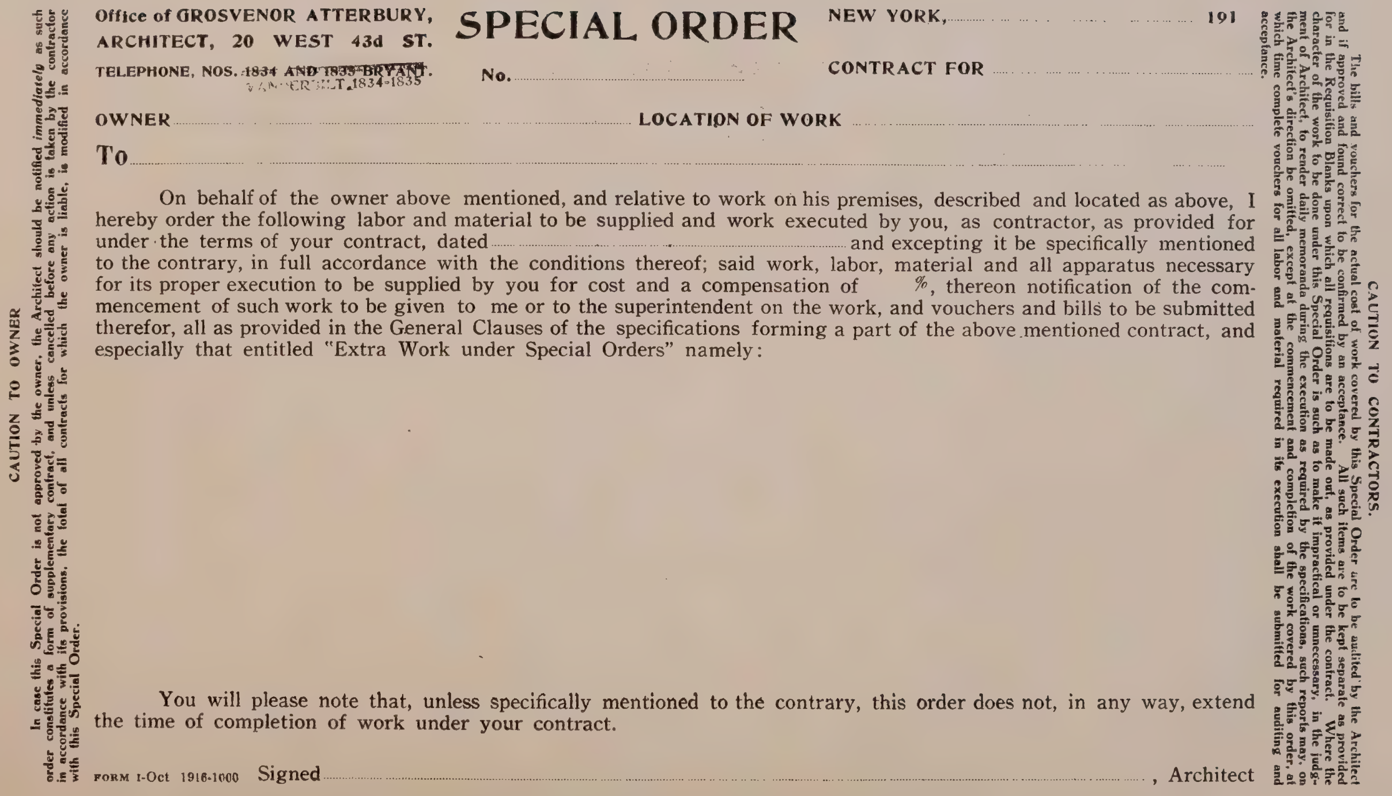
CONTRACT FOR......................................

OWNER...................................... **LOCATION OF WORK**......................................

To......................................

In connection with the above mentioned work and with reference to the drawings, specifications and agreements for its execution by you I wish to notify you of the following, to which you will please give your immediate attention.

Heading of Form Used in the Office of Grosvenor Atterbury, Architect, New York.



Office of GROSVENOR ATTERBURY,
ARCHITECT, 20 WEST 43d ST.
TELEPHONE, NOS. ~~1834 AND 1835 BRYANT~~. VANDERBILT 1834-1835

SPECIAL ORDER

NEW YORK,.. 191

No...

CONTRACT FOR ....

OWNER .... LOCATION OF WORK ....

To..

On behalf of the owner above mentioned, and relative to work on his premises, described and located as above, I hereby order the following labor and material to be supplied and work executed by you, as contractor, as provided for under the terms of your contract, dated .... and excepting it be specifically mentioned to the contrary, in full accordance with the conditions thereof; said work, labor, material and all apparatus necessary for its proper execution to be supplied by you for cost and a compensation of %, thereon notification of the commencement of such work to be given to me or to the superintendent on the work, and vouchers and bills to be submitted therefor, all as provided in the General Clauses of the specifications forming a part of the above mentioned contract, and especially that entitled "Extra Work under Special Orders" namely:

You will please note that, unless specifically mentioned to the contrary, this order does not, in any way, extend the time of completion of work under your contract.

FORM 1-Oct 1916-1000 Signed ...., Architect

CAUTION TO CONTRACTORS.

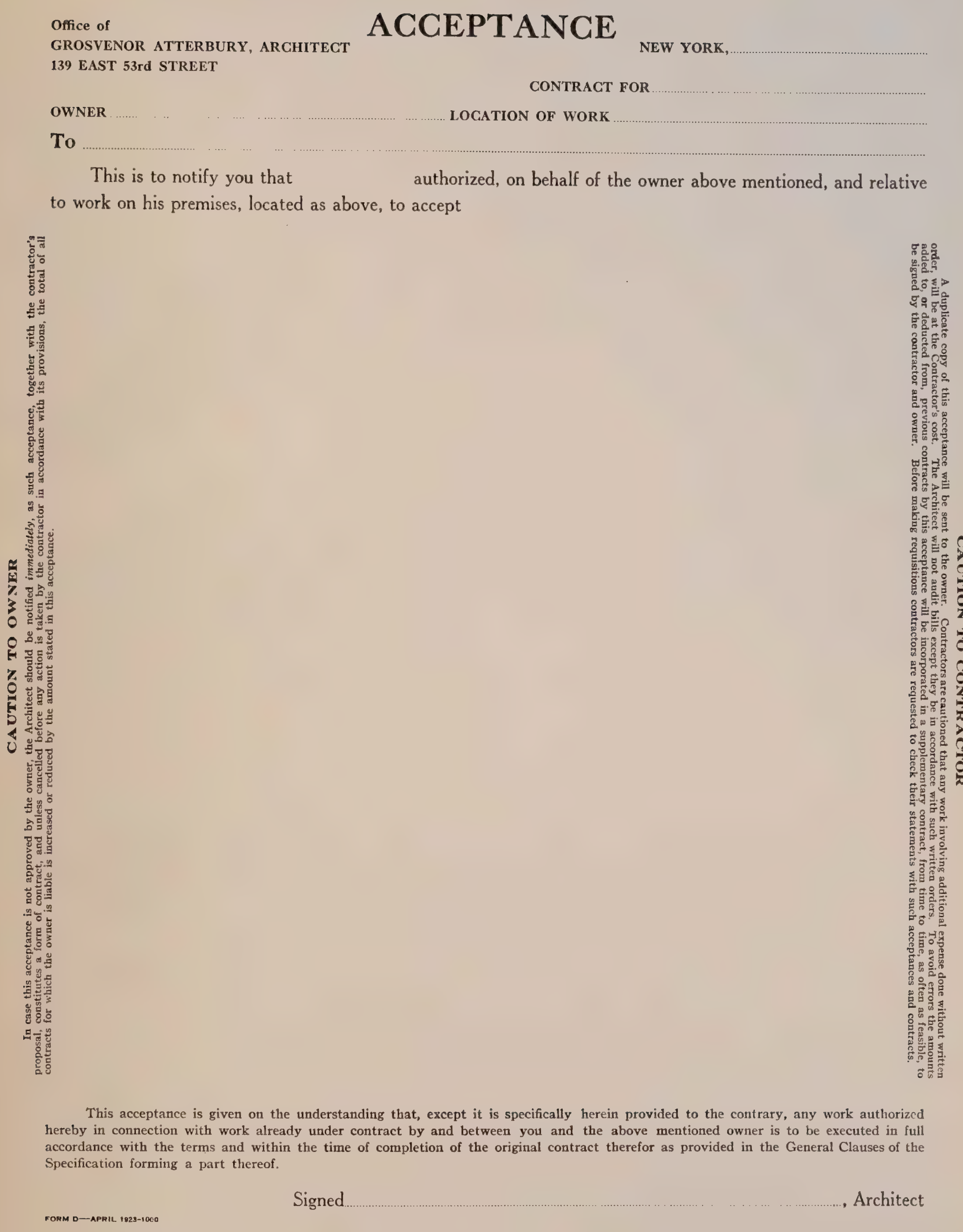
The bills and vouchers for the actual cost of work covered by this Special Order are to be audited by the Architect and if approved and found correct to be confirmed by an acceptance. All such items are to be kept separate as provided for in the Requisition Blanks upon which all requisitions are to be made out, as provided under the contract. Where the character of the work to be done under this Special Order is such as to make it impractical or unnecessary, in the judgment of Architect, to render daily memoranda during the execution as required by the specifications, such reports may, on the Architect's direction be omitted, except at the commencement and completion of the work covered by this order, at which time complete vouchers for all labor and material required in its execution shall be submitted for auditing and acceptance.

CAUTION TO OWNER

In case this Special Order is not approved by the owner, the Architect should be notified *immediately* as such order constitutes a form of supplementary contract, and unless cancelled before any action is taken by the contractor in accordance with its provisions, the total of all contracts for which the owner is liable, is modified in accordance with this Special Order.

Form Used in the Office of Grosvenor Atterbury, Architect, New York City.

Printed on Pink Paper.



Office of
GROSVENOR ATTERBURY, ARCHITECT
139 EAST 53rd STREET

ACCEPTANCE

NEW YORK, ...

CONTRACT FOR ....

OWNER .... LOCATION OF WORK ....

To ....

This is to notify you that authorized, on behalf of the owner above mentioned, and relative to work on his premises, located as above, to accept

CAUTION TO OWNER

In case this acceptance is not approved by the owner, the Architect should be notified *immediately*, as such acceptance, together with the contractor's proposal, constitutes a form of contract, and unless cancelled before any action is taken by the contractor in accordance with its provisions, the total of all contracts for which the owner is liable is increased or reduced by the amount stated in this acceptance.

CAUTION TO CONTRACTOR

A duplicate copy of this acceptance will be sent to the owner. Contractors are cautioned that any work involving additional expense done without written order, will be at the Contractor's cost. The Architect will not audit bills except they be in accordance with such written orders. To avoid errors the amounts added to, or deducted from, previous contracts by this acceptance will be incorporated in a supplementary contract, from time to time, as often as feasible, to be signed by the contractor and owner. Before making requisitions contractors are requested to check their statements with such acceptances and contracts.

This acceptance is given on the understanding that, except it is specifically herein provided to the contrary, any work authorized hereby in connection with work already under contract by and between you and the above mentioned owner is to be executed in full accordance with the terms and within the time of completion of the original contract therefor as provided in the General Clauses of the Specification forming a part thereof.

Signed ...., Architect

FORM D—APRIL 1923–1000

Form Used in the Office of Grosvenor Atterbury, Architect, New York City.

OFFICE OF
GROSVENOR ATTERBURY,
ARCHITECT,
139 EAST 53rd STREET.

CASH ALLOWANCE ORDER

NEW YORK, ...192

No. ....

CONTRACT FOR ....

OWNER ....

LOCATION OF WORK ....

To ....

THIS is to notify you, relative to the work above described, of the following order hereby given by me, as provided for under the clauses in the specification for the above described work which require you, as contractor, to provide certain cash allowances that may be expended at the discretion and by the direction of the Architect.

NOTE—Contractors will please note that cash allowance orders do not change the total of the contract price, and are valid only within the limits of the cash allowances provided for under the original contract, or as increased by virtue of credits obtained by changes or omissions in the work and transferred to the cash allowance account.

NOTE—Cash allowances as provided in the specifications are net, not being subject to any builders' commissions for their manipulation, such commission or compensation being covered elsewhere in the contract price.

On receipt of this order you will please check your own accounts and notify me immediately if they do not correspond with the following Statement:

STATEMENT

Total of all cash allowances provided under original contract . . . . $................................

Unexpended balance remaining of such allowances as amended in accordance with supplementary contracts and last previous cash allowance order No. ....

Amount of addition to, or deduction from, this balance made by this order, as above . . . .

Leaving unexpended balance, subject to future order, or if unexpended, to be credited to owner's account ....

Signed ....
Architect.

FORM T-1-1M-JULY, 1921

mits. This card should be kept up to date.

2. Extra Order Forms. If the Standard Contract Forms recommended by the A. I. A. are used, at least three different forms will be required:

a. "Acceptance"—for lump sum price;

b. "Special Order"—for day's work performance;

c. "Cash Allowance"—for handling of those funds.

The filing system is facilitated by using a different color for each form.

Other forms may be found useful, viz:—

For telephone messages; for conferences with clients, and for Office Memorandum. The full value of such forms will not, however, be realized unless used consistently and properly filed. Whether on printed forms, typed or hand written, different colored papers aid in immediate identification.

No architect ever lost the respect of his client by being businesslike and, therefore, let us start our first work in that manner.

Have a blank Record Card at hand for reference and obtain the necessary data, as to ownership of property, who will sign contracts, preference, if any, as to expert consultants, should they be necessary, and have a distinct understanding as to who shall pay for their services. Also agree with your client as to your own fee and the services you agree to render. At the conclusion of the interview reduce your notes to compact form, have them typewritten in duplicate, send one copy to the client, asking his agreement thereto, and file the carbon. If in proper form, this will, in many cases, serve as a contract for service. As the size of your practice increases you may find it advisable to have a printed schedule of charges which may be used to advantage, unless you prefer to accept and use all the Standard Documents of the A. I. A.

As the preliminary studies develop and the conferences with the client multiply you will find increased needs of the memorandum forms, particularly when the principal holds the conference with the client, passing the results on to the drafting room and other departments, if any. The time spent in making notes is more than compensated in the time saved elsewhere, not to mention misunderstandings.

Beginning at this point make at least three copies of all memoranda of conferences. Send one to the owner, asking for his approval or written dissent from any of the items: one to the drafting room and the third to files, noting date of transmission to owner. When the memorandum covers items affecting specifications it may be advisable to have a fourth copy for that department.

Preliminary drawings are usually made at a scale of ⅛-inch to the foot and should be sufficiently explicit to enable a junior draftsman to develop them into working drawings easily. Whether the architect himself or a subordinate should be responsible for the design will depend upon the size of the organization, but in so far as the architect elects to make the decision as to the design just so far should he be prepared to make it promptly and definitely. In the former case he should make the studies until satisfied with the result before handing them over to his assistant. This avoids wasted drafting time.

When the drawings are being prepared for estimate and contract the outside experts, Structural and Mechanical Engineers, should be called in to advise in their respective fields. Thus the plans may be completed without many of the changes which otherwise are certain to arise. It is advisable to furnish each with prints of the unfinished plans so that their own plans may be prepared simultaneously with the architectural drawings. At the same time the specifications should be started so that the specification writer may have the opportunity to check the plans and ask all his questions. Don't hesitate to ask the client to make the decisions on matters of personal preference. Before the building, particularly if it be a home, is finished he will have a great deal to say. Forestall this all you can. Have the questions prepared in condensed form, arranged in logical order and submit them in writing. Explain why this is done and ask him to give his answers in writing. In nearly every case the client will feel flattered at being thus consulted.

Two questions always arise at this point:

(a) Whether to prepare the estimating and working plans in pencil on paper, or, (b) in ink on tracing linen.

In the former case it is presumed that the drawings will be advanced only as far as is necessary to get bids and award a contract. Then comes a period of hectic activity to trace and figure the drawings, check construction and, in brief, make the working drawings. If the architect could always feel even reasonably sure that the work would progress to the contract stage, then the latter method would certainly expedite the building. A builder who is obliged to wait from two to three weeks after signing a contract before he receives his full sailing orders may lose his first enthusiasm before the excavation is finished.

The drawings must be supplemented by the specifications and if the latter are started early in the proceedings they can be finished on time. In my opinion no specification should even be typed, much less issued, until the man in charge of the job (in the drafting room) has had an opportunity to check the manuscript and to reconcile any discrepancies or omissions in these two equally important parts of the contract. It is not expediting but demoralizing to be obliged to issue "bulletins" of "interpretations" or "addenda" to the bidders while they are estimating. Take advantage of this period to have the finished specifications read over with the plans at hand, to pick up any inaccuracies.

Drafting Room methods open up a subject capable of much discussion, and about which every architect has his own fully developed ideas. It is too vast to be discussed in detail. May I, however, suggest the following:

a. Do all the studying of design on the working drawings and see that the specifications are explicit, i. e., give the sizes of finished woodwork, whether built up or solid, the sizes of plaster cornices, whether plain run or ornamented, and other matters in like manner, instead of saying "as detailed." Then your details become what is intended under the usual contract, viz.—true enlargements for constructional purposes. Also much argument with the builder may be avoided.

b. Make as many details as possible quarter full size, using full size only for moulding contours and ornamental work.

c. When you have arrived at a good practicable detail for any fixed purpose, a window or door frame for instance, stick to it until you learn of something better. Many times such a detail need be merely traced and issued under the new job title. Look over the general run of details in your files and you will be surprised to find how many are so nearly alike that if they had been actual duplicates the finished appearance of the work would have been equally good.

d. Make all details on tracing paper, or linen for the smaller "stock details," and issue in blueprint form.

e. So far as it can consistently be done, require "shop drawings" to be submitted in duplicate. Have them corrected until satisfactory, then return one copy approved, keeping the other in your file. This will relieve the drafting room and at the same time put the responsibility for much technical information where it belongs, viz.—on the manufacturer.

The suggestions above outlined can be carried out in practice in any architect's office where the employees consist of a stenographer, who is supposed to answer the telephone, an office boy and two, or perhaps only one, draftsmen. This assumes that the architect himself does the major part of the designing and exercises a general oversight of the bookkeeping. On the other hand it may be expanded at will to apply to a much larger body of employees.

The subjects of office organization, preparation of contracts, field supervision and bookkeeping, as related to building contracts would, in themselves, furnish material for a lengthy paper.

The form of organization of the office force will depend so much upon the number employed that it is difficult to make recommendations in specific form. Good business sense will, of course provide for the proper training of assistants so that they may in time of need assume the duties of their superiors. In the last analysis, however, it will generally be found that it is the architect himself who must be the driving force and that on his ability or habit of giving the final decision promptly and stimulating his employees, will rest the burden of the successful practice.

The others may be condensed by use of the Standard Forms of the A. I. A. to cover the contracts; by the architect himself doing all the superintending to cover the next; and the stenographer doing the bookkeeping to cover the last; or they may each be elaborated upon and expanded to provide work for a much larger number of employees. In even the smallest offices, however, there is, in my judgment, only one safe rule to follow in these branches of the work, viz.—make all decisions, all orders to contractor and all reports in writing, so that the record may be kept clear.

"Some are born great, some achieve greatness and some have greatness thrust upon them."

Most of us will be obliged to achieve by our own efforts all the greatness that we may possess. Therefore, as a stimulus to that end, I would close with two quotations which have always been of personal help.

"Get your happiness out of your work or you will never know what real happiness is," and "Blessed is the man who has found his work."

By Edward I. Shire, Architect,
New York City.

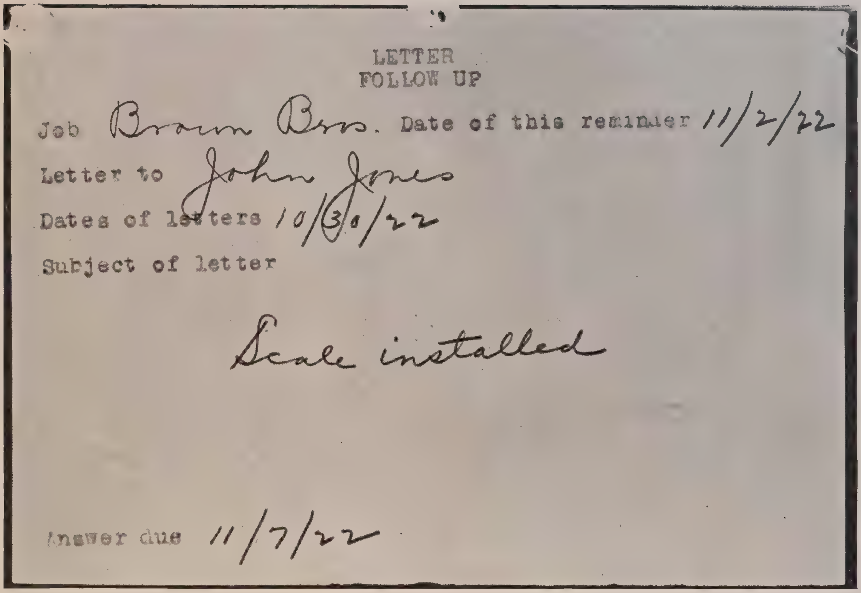
IN LOOKING over my memoranda concerning office practice I find that, though most of the items are similar to those generally used, there are a few that may be of general interest.

There is nothing more important than simple follow-up systems in an architect's office. Among others, I have three which I call "Letter Follow-up," "Office Follow-up," and "Building Follow-up." I enclose herewith copies of these slips.

The "Letter Follow-up" slips are filled out from letters as they are being filed and no letter requiring an answer or containing an item requiring attention is filed without this follow-up slip which is also filed according to date as follows: A filing drawer contains three sets of cards numbered from one to thirty-one, which represent the dates for three consecutive months. Assume a "Letter Follow-up" should have an answer a week from today, the follow-up slip would be filed in front of the card dated December 7th. Each day these card files are consulted to see whether there are any slips that should be followed up, whether "Letter," "Building" or "Office" slips. Each slip, therefore, comes automatically to the stenographer's attention on the date that investigation should be made to see whether the item in question has been attended to. If not, the matter can be followed up immediately or the slip may be replaced in the file for some later date if further time is considered advisable. Each day the current numbered card is placed in the back of all of the cards, thereby keeping the current date as the first card in this file and always keeping cards for three months in advance.

The purpose of the "Building Superintendence" slips is evident from the slip itself and the "Office Follow-up" is for general items requiring attention in the office whether relating to jobs or anything requiring attention in the office.

Herewith are copies of time sheets which I find



LETTER
FOLLOW UP

Job Brown Bros. Date of this reminder 11/2/22

Letter to John Jones

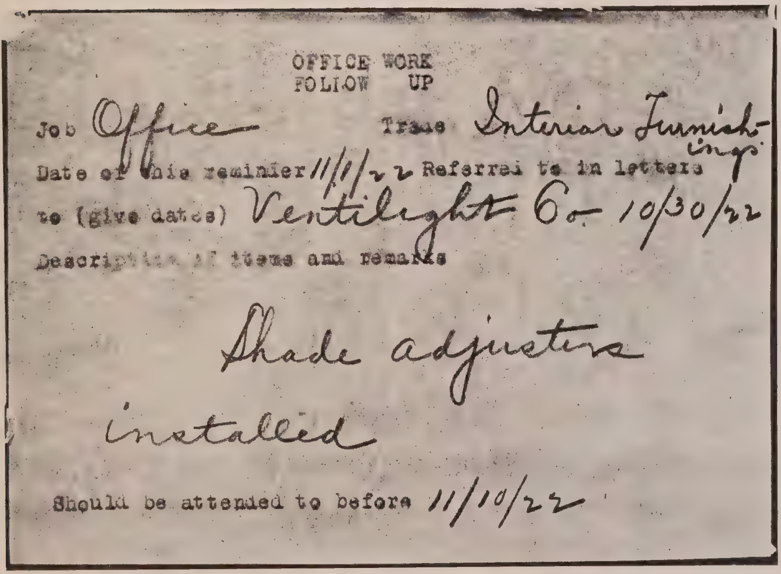
Dates of letters 10/30/22

Subject of letter

Scale installed

Answer due 11/7/22

Letter Follow Up. Size 4¼ in. x 6 *in.*



OFFICE WORK
FOLLOW UP

Job Office Trade Interior Furnishings

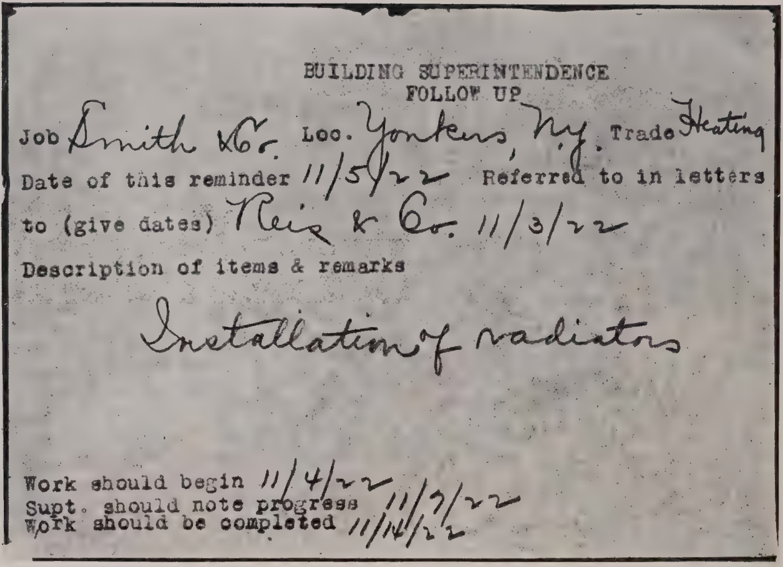
Date of this reminder 11/1/22 Referred to in letters to (give dates) Ventilight Co. 10/30/22

Description of items and remarks

Shade adjusters installed

Should be attended to before 11/10/22

Office Work Follow Up. White Paper. Size 4¼ in. x 6 *in.*
Forms Used in the Office of Edward I. Shire, Architect, New York.



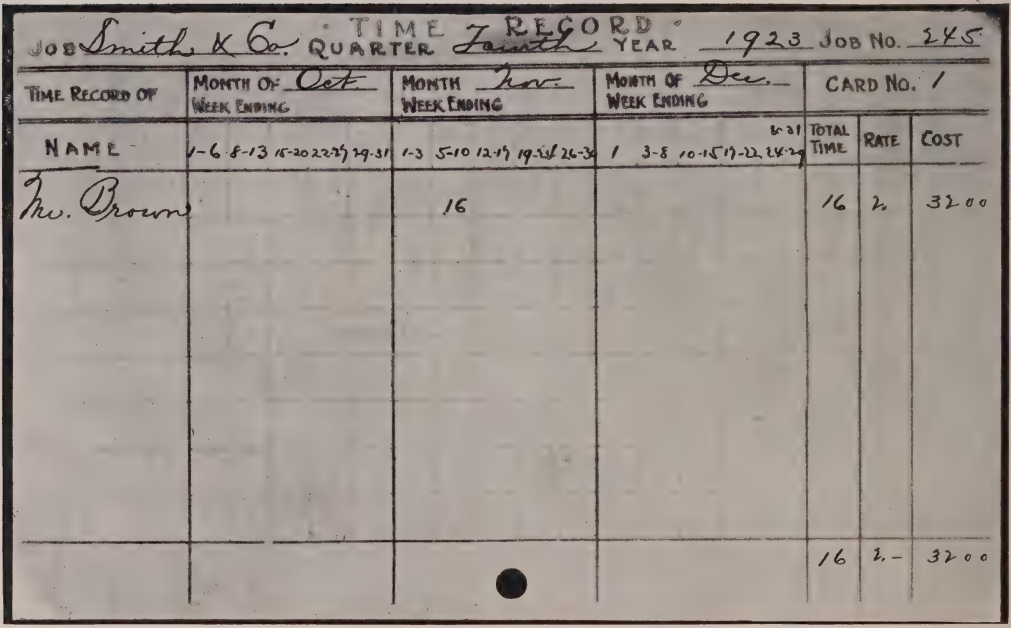
BUILDING SUPERINTENDENCE
FOLLOW UP

Job Smith & Co. Loc. Yonkers, N.Y. Trade Heating
Date of this reminder 11/5/22 Referred to in letters
to (give dates) Reis & Co. 11/3/22
Description of items & remarks

Installation of radiators

Work should begin 11/4/22
Supt. should note progress 11/7/22
Work should be completed 11/14/22

Building Superintendence Follow Up. Size 4¼ in. x 6 in.



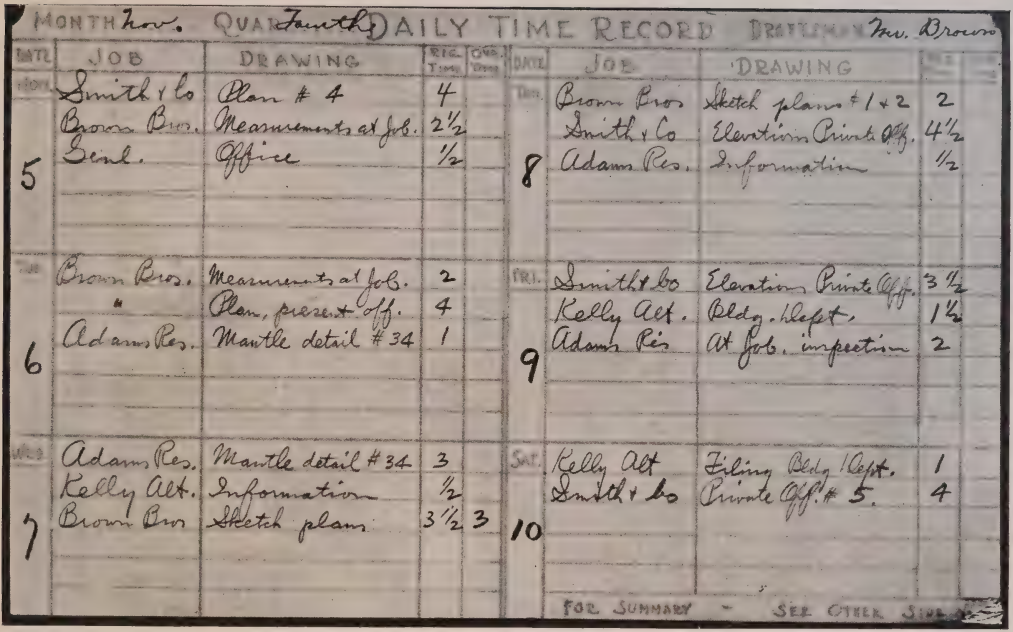
TIME RECORD

JOB Smith & Co. QUARTER Fourth YEAR 1923 JOB No. 245

TIME RECORD OF	MONTH OF Oct WEEK ENDING					MONTH Nov. WEEK ENDING					MONTH OF Dec. WEEK ENDING					CARD No. 1		
NAME	1-6	8-13	15-20	22-27	29-31	1-3	5-10	12-17	19-24	26-30	1	3-8	10-15	17-22	24-29 & 31	TOTAL TIME	RATE	COST
Mr. Brown							16									16	2.	32 00
																16	2.–	32 00

Time Record, White Card, Size 5 in. x 8 in.

Forms Used in the Office of Edward I. Shire, Architect, New York.

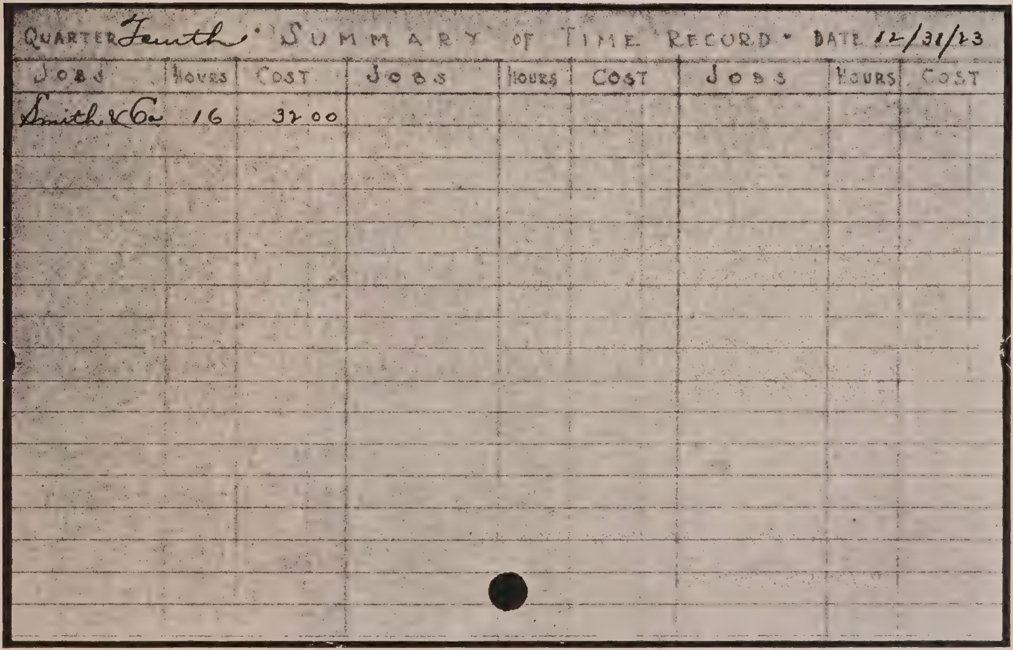


MONTH Nov. QUAR Fourth DAILY TIME RECORD DRAFTSMAN Mr. Brown

DATE	JOB	DRAWING	REG. TIME	OVR. TIME	DATE	JOB	DRAWING		
MON. 5	Smith & Co	Plan # 4	4		THU. 8	Brown Bros	Sketch plans # 1 + 2	2	
	Brown Bros.	Measurements at Job.	2½			Smith & Co	Elevations Private Off.	4½	
	Genl.	Office	½			Adams Res.	Information	½	
TUE. 6	Brown Bros.	Measurements at Job.	2		FRI. 9	Smith & Co	Elevations Private Off.	3½	
	"	Plan, present off.	4			Kelly Alt.	Bldg. Dept.	1½	
	Adams Res.	Mantle detail # 34	1			Adams Res	At Job. inspection	2	
WED. 7	Adams Res.	Mantle detail # 34	3		SAT. 10	Kelly Alt	Filing Bldg Dept.	1	
	Kelly Alt.	Information	½			Smith & Co	Private Off. # 5.	4	
	Brown Bros	Sketch plans	3½	3					

FOR SUMMARY — SEE OTHER SIDE

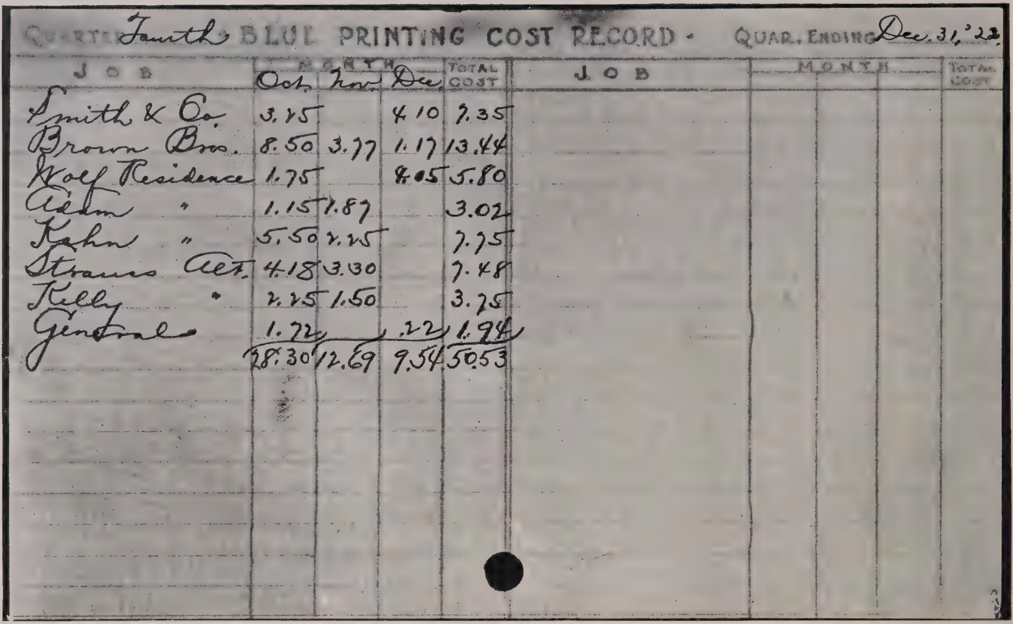
Daily Time Record, on White Paper, Size 5 in. x 8 in.



QUARTER Fourth · SUMMARY OF TIME RECORD · DATE 12/31/23

JOBS	HOURS	COST	JOBS	HOURS	COST	JOBS	HOURS	COST
Smith & Co	16	32.00						

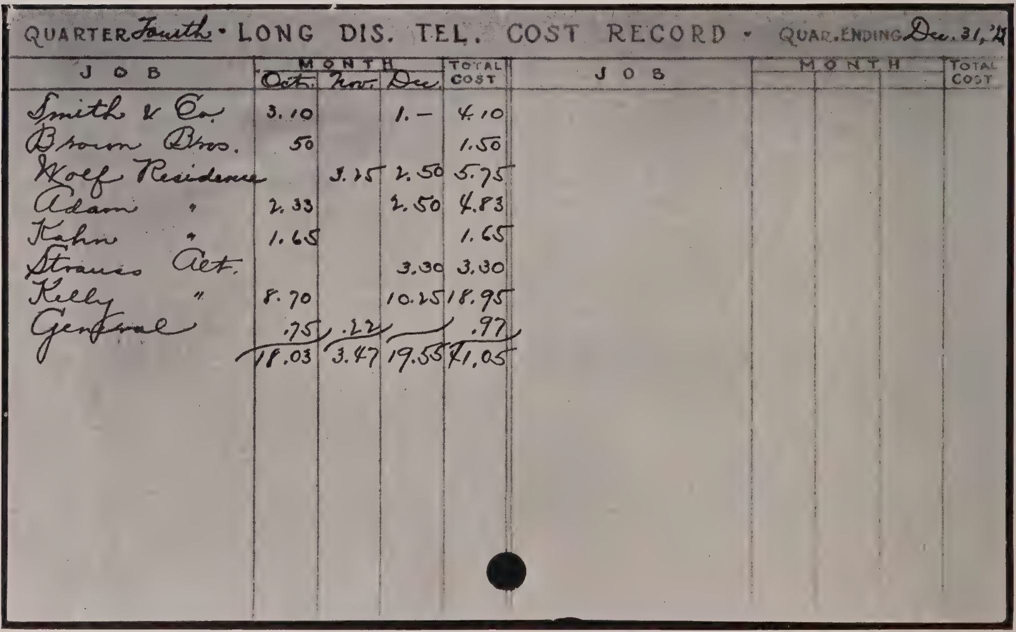
Summary of Time Record, White Card, Size 5 in. x 8 in.
Forms Used in the Office of Edward I. Shire, Architect, New York.



QUARTER Fourth BLUE PRINTING COST RECORD · QUAR. ENDING Dec. 31, '22

JOB	MONTH			TOTAL COST	JOB	MONTH			TOTAL COST
	Oct.	Nov.	Dec.						
Smith & Co.	3.25		4.10	7.35					
Brown Bros.	8.50	3.77	1.17	13.44					
Wolf Residence	1.75		4.05	5.80					
Adam "	1.15	1.87		3.02					
Kahn "	5.50	2.25		7.75					
Strauss Apt.	4.18	3.30		7.48					
Kelly "	2.25	1.50		3.75					
General	1.72		.22	1.94					
	28.30	12.69	9.54	50.53					

Blue Printing Cost Card, Salmon Card, Size 5 *in.* x 8 *in.*



QUARTER Fourth · LONG DIS. TEL. COST RECORD · QUAR. ENDING Dec. 31, '22

JOB	MONTH			TOTAL COST	JOB	MONTH			TOTAL COST
	Oct.	Nov.	Dec.						
Smith & Co.	3.10		1.–	4.10					
Brown Bros.	50			1.50					
Wolf Residence		3.25	2.50	5.75					
Adam "	2.33		2.50	4.83					
Kahn "	1.65			1.65					
Strauss Apt.			3.30	3.30					
Kelly "	8.70		10.25	18.95					
General	.75	.22		.97					
	18.03	3.47	19.55	41.05					

Long Distance Telephone Cost Record, Buff Card, Size 5 *in.* x 8 *in.*

Forms Used in the Office of Edward I. Shire, Architect, New York.

better for my own purpose than any of the standard sheets that can be purchased. The daily time record sheets are individual for each employee. These are transferred weekly to the white time card, using a different card for each job and at the end of three months, a summary of the totals on each white time card is transferred to the blue summary card, the totals on this summary being used by the bookkeeper in calculating the office costs of the jobs.

For practical purposes, it has been found advisable to use forty hours for a week for each employee, though only thirty-eight hours is usually accounted for. Any difference between the actual hours accounted for and forty is charged to general time. Such differences also include holidays, vacations and the like. The forty-hour division simplifies the hourly calculation. In cases, however, where the actual cost is used in charging fees rather than a percentage system the two hours unaccounted for each week, or practically 5%, is added to the employee's time to give the exact cost on that particular job.

I enclose also copies of the cards showing the monthly costs on each job for blue prints and long distance telephone calls, this data being obtained from the bills. As with the time costs, a summary for three months is used by the bookkeeper.

The forms enclosed are made on the "Ditto" machine formerly known as the Commercial Duplicator. I find this machine of considerable value for various purposes, including the duplicating of most of my specifications. One great advantage of such duplicating over the typewritten specifications is that when one copy is corrected, there is no fear that some of the duplicates may accidently not be similarly corrected.

By Carrère & Hastings, Shreve, Lamb & Blake, Architects, New York.

PRELIMINARY sketches are made either by a member of the firm or by some one immediately under the firm's direction, and the interviews with clients, investigations, etc., are handled in the same way. After approval of the first sketches the work is turned over to a captain—there is no head draftsman. The work is then divided up among different squad bosses, or among men working for them, and all in turn are under the direct supervision of the members of the firm who allocate certain work amongst themselves. This system goes right through the job. All the men, draftsmen, squad bosses, superintendent, specification man, everybody who has to do with the execution is directly responsible to the firm member who has that particular work in charge.

The engineering department is carried on along the same principles—heating, plumbing, electricity, elevators, are all done in the office, the engineers being in constant touch with the squad captains.

As far as time keeping goes, the men have a certain leeway in their working time. Each man is supposed to put in eight hours work each day. If he falls behind in one day's work he is allowed a certain length of time in which to make this up, working before or after hours, or Saturday afternoons. Every two or three days the time each man spends on a certain piece of work is taken and charged to that work. This record is kept and forms part of the basis of calculation of the cost of each piece of work.

This method of handling the work is explained more fully in the following:

OUTLINE OF ARCHITECTURAL SERVICES

I. DESIGN—1. *Architectural*

A. *Plan Arrangement.*—This is determined by one of the firm members in charge of design, after the program of requirements has been formulated in consultation with the owners or their representatives. Various schemes are made and illustrated by comparative studies and diagrams to fix the best arrangement of the various parts of the building—elevators, stairs, toilets, etc., areas and cubes being taken for each scheme, and compared, always with the end in view of achieving not only economy and practicability in construction and operation but also of solving the practical problem in such a way that the building when completed will present a pleasing and harmonious appearance.

B. *Elevations*—The elevations which are commenced as soon as the general lines of the plan are determined upon are studied, first at a small scale to determine the general masses of the building which, since the Zoning Regulations went into effect, have become so important, then at a larger size and greater detail until the final scheme has been decided. During the course of the work, perspective sketches from various points of views are made in order that the building may be studied from different angles, and sometimes models are made at small scale to assist in this work.

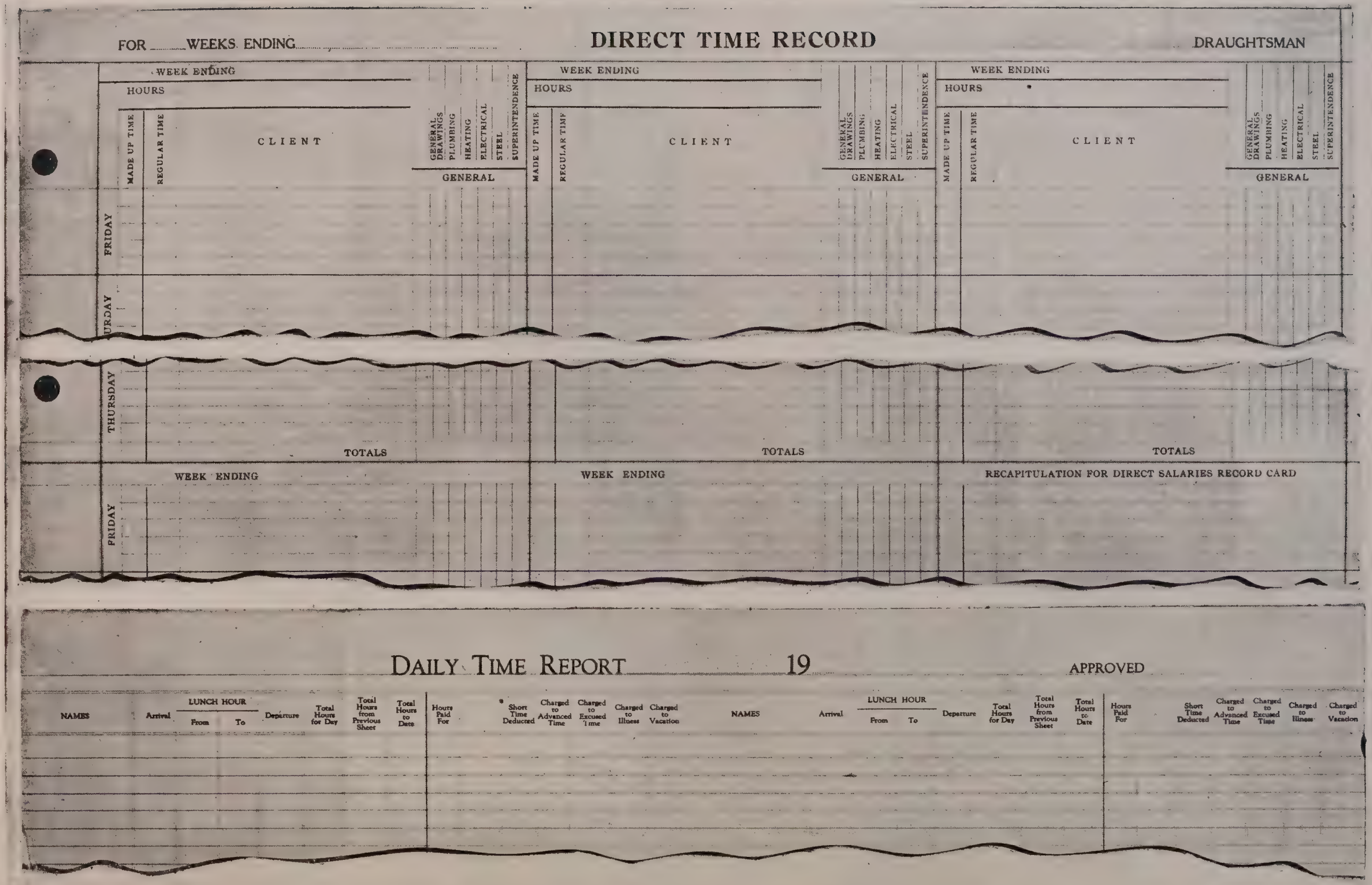
The designs and drawings for the foundation and the steel work are, in the case of our larger buildings, done by consulting engineers or by the organization which executes the work in consultation with us and under our supervision. All their designs and drawings are checked over and approved by us. Drawings for concrete, masonry and other structural features are made in our office.

Mechanical—Designs for this branch of the work are done by our own engineers and are worked up in conjunction with the architectural drawings. Comprised in this are the drawings for plumbing, heating, ventilating, electric work, elevators, etc.

II. ADMINISTRATION

1. *Estimates*—The taking of estimates and placing of contracts are all done by our office through the general contractor or builder and in consultation with him and the owners.

2. *Auditing and Accounting*—The system of bookkeeping devised for us by our auditor, consists of a double entry system using voucher records for disbursements. It has three general subdivisions, as follows: 1. Contract accounts between the client and the contractor. Applications for payments to



FOR ____ WEEKS ENDING ____

DIRECT TIME RECORD

DRAUGHTSMAN

	WEEK ENDING									
	HOURS									
	MADE UP TIME	REGULAR TIME	CLIENT	GENERAL DRAWINGS	PLUMBING	HEATING	ELECTRICAL	STEEL	SUPERINTENDENCE	
				GENERAL						
FRIDAY										
URDAY										
THURSDAY										
			TOTALS							
	WEEK ENDING									
FRIDAY										

The column headings (WEEK ENDING, HOURS, MADE UP TIME, REGULAR TIME, CLIENT, GENERAL DRAWINGS, PLUMBING, HEATING, ELECTRICAL, STEEL, SUPERINTENDENCE, GENERAL) are printed three times across the sheet; TOTALS is printed under each of the three sections; the lower headings read WEEK ENDING, WEEK ENDING, RECAPITULATION FOR DIRECT SALARIES RECORD CARD.

DAILY TIME REPORT ____ 19 ____ APPROVED ____

NAMES	Arrival	LUNCH HOUR		Departure	Total Hours for Day	Total Hours from Previous Sheet	Total Hours to Date	Hours Paid For	Short Time Deducted	Charged to Advanced Time	Charged to Excused Time	Charged to Illness	Charged to Vacation	NAMES	Arrival	LUNCH HOUR		Departure	Total Hours for Day	Total Hours from Previous Sheet	Total Hours to Date	Hours Paid For	Short Time Deducted	Charged to Advanced Time	Charged to Excused Time	Charged to Illness	Charged to Vacation
		From	To													From	To										

Forms Used in the Office of Carrère & Hastings, Shreve, Lamb & Blake, Architects, New York. Direct Time Record, 15¾ in. high by 16⅝ in. wide, printed on both sides, yellow paper. At bottom of Direct Time Record Sheet, totals in two columns at left and under recapitulation, totals for month. Daily Time Report, 10½ in. x 17 in., white paper, one side.

the contractor are re-checked and approved after preliminary checking by the field superintendent and certificates issued and recorded. Vouchers for all requisitions are kept on file for the inspection of the client. 2. Office accounts with clients, which is a regular accounting of the business of the firm, recording all cash receipts and disbursements and all bills issued to clients. 3. Cost accounting, which consists in charging to each piece of work the direct salaries of the draftsmen and superintendents employed upon it, plus its proportion of overhead cost (rent, light, salaries of clerical force, drawing accounts of members of the firm, etc.). A daily record is kept of the time spent by each draftsman on each piece of work which is summarized monthly and overhead costs for that period are calculated on that basis. In this way, the actual costs on each piece of work can be readily determined. The books are audited by a certified public accountant every three months.

3. *Clerical.*—This comprises—1. Secretaries and stenographers. The incoming mail is here distributed to the various men in charge, copies of letters made, etc. 2. Letter file room. Correspondence is filed separately under the same work number as appears on the plans and is further subdivided into various classes, such as letters to and from clients, those dealing with stone-work, with steel, with plumbing, etc. 3. Plan file room. Here are kept all original drawings and plans filed in sliding racks and card indexed. All orders for blue prints which are made in triplicate by the "squad captains" are here tabulated and recorded and sent to the printer. This department also has charge of all supplies and of the issuing of drawing materials to the draftsmen. Record is kept of the location of the drawings and photographs of all completed work. 4. Librarian, who has charge of the architectural books and photographs, rebinding and repairs. These books and photographs are card indexed and recorded.

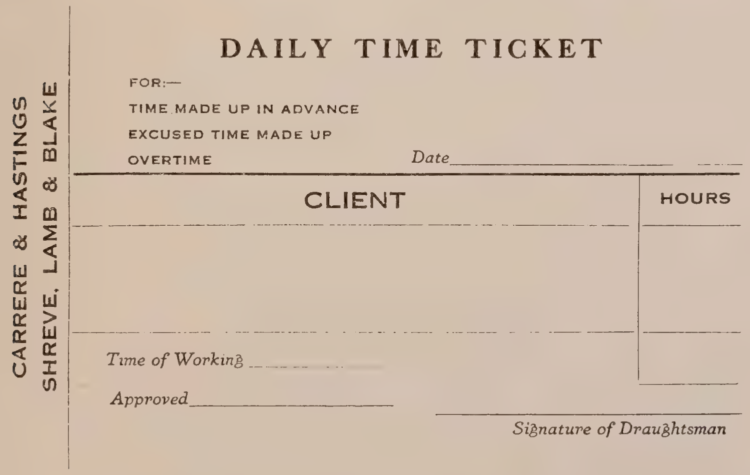
III. SUPERINTENDENCE

1. Field—A superintendent is assigned to each piece of work and it is his duty to pass on all materials delivered to the site, to have general supervision of the operation, and to insure coordination and cooperation between the work done in the office and at the building. He also audits and checks the various pay-rolls, requisitions, certificates of payment before approval. These superintendents are members of our own staff and are men who have been with us for a long time.

2. Office—Shop drawings are submitted to us in duplicate and are checked and corrected by the draftsmen and checkers directly in charge of the drawings from which they were made, which insures complete familiarity with the work. If there are any corrections, the sub-contractor must resubmit his shop drawings for final approval.

The criticism and approval of models and samples is always done personally by one of the members of the firm in charge of the work.

Detail designs of various parts of the building are made at three-quarter inch scale and at full size. The shop drawings of the sub-contractors are made from these and they are therefore a very important part of the work. The drawings of these details are made either by or under the direct supervision of one of the firm.



CARRERE & HASTINGS
SHREVE, LAMB & BLAKE

DAILY TIME TICKET

FOR:—
TIME MADE UP IN ADVANCE
EXCUSED TIME MADE UP
OVERTIME
*Date*____________________

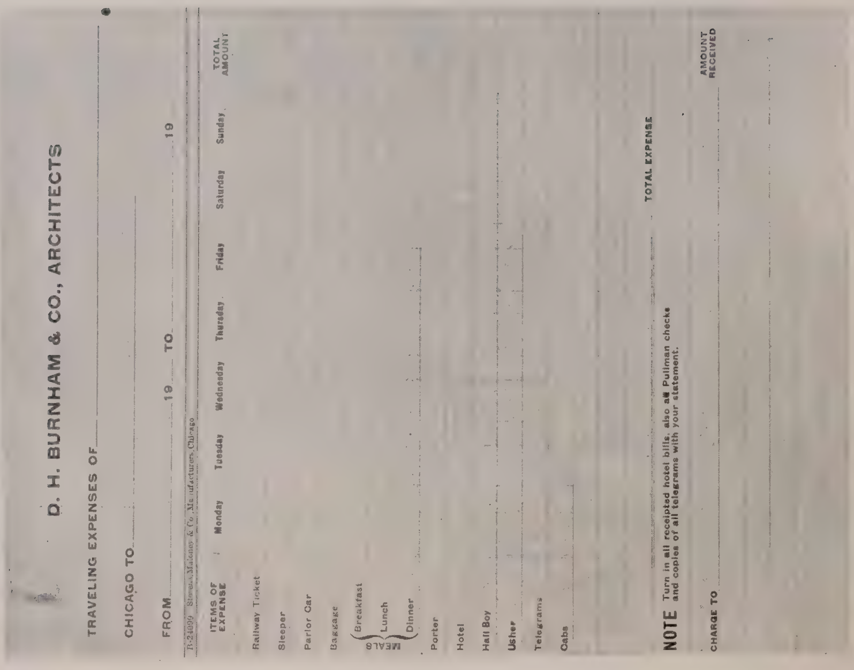
CLIENT	HOURS

Time of Working ________

*Approved*____________________

____
Signature of Draughtsman

Form Used in the Office of Carrère & Hastings, Shreve, Lamb & Blake, Architects, New York. Daily Time Ticket.



D. H. BURNHAM & CO., ARCHITECTS

TRAVELING EXPENSES OF

CHICAGO TO

FROM 19 TO 19

B-24099 Stevens, Maloney & Co., Manufacturers, Chicago

ITEMS OF EXPENSE	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	TOTAL AMOUNT
Railway Ticket								
Sleeper								
Parlor Car								
Baggage								
MEALS Breakfast								
Lunch								
Dinner								
Porter								
Hotel								
Hall Boy								
Usher								
Telegrams								
Cabs								
							TOTAL EXPENSE	

NOTE Turn in all receipted hotel bills, also all Pullman checks and copies of all telegrams with your statement.

CHARGE TO

AMOUNT RECEIVED

Statement of Travelling Expenses. Size 6¼ in. x 8½ in.

WEEK ENDING 192

NAME

	MON.	TUES.	WED.	THURS.	FRI.	SAT.	TOTAL NO. HOURS	

C&Co. 5290

Time Report, Size 5½ in. x 8½ in.

Forms Used in the Office of D. H. Burnham & Co., Architects, Chicago, Ill.

By Frederick W. Garber of the firm of Garber & Woodward, Architects, Cincinnati, O.

GOOD architecture and the making of profit are the aims of this office as, no doubt, of all other offices. All our work is divided into two groups. Work done by Mr. Woodward and work done by myself. That again is given directly to one of three men in the office. This method would indicate that we have no head draftsman, which is true. We have three head draftsmen.

As an example. Assume that one of the members of the firm has charge of a certain piece of work. He begins it and ends it. It is turned over to one of these three men in the office and he is made directly responsible to the principal. These three men have a financial interest in our firm. As soon as possible he is brought into conference with the client and eventually relieves the principal of a good deal of this work.

On any work handled by me, my word is final and the man in the office who has charge of it will have the last word in so far as the drafting room is concerned. He might use one or both of the other men who hold similar positions, but his authority is final. He follows the work through sketches, working drawings, details and full sizes. Most of the contact with superintendent is through him.

On questions of policy and things of that sort Mr. Woodward or myself is called in. The three men in the drafting room agree as to who shall help them and which draftsman shall be used for the work. Their intimate connection with them relieves us of a good deal of burden and you may be assured that they pick out the most capable men for doing specific kinds of work.

We are in constant touch with these men and they never permit details or full sizes to leave the office until we have gone over them after they are blocked out.

Mr. Woodward and myself each have a secretary who carries on the reports, makes out estimates, attends to correspondence and things of that sort which begin with the superintendent and come up through the same channel only in the reverse direction from the drawings. For quite a number of years we have made a statement to each and every one of our clients, each month, of the actual condition of their work. We find that this keeps the client continually posted and there is never any discussion as to cost.

One day each week is devoted to Building Committee meetings at which the clients, members of the firm and one of the three men attend. These meetings simplify and expedite the work and keep the client in close touch with his project.

Our method is so simple that it is hard to understand why anyone would be particularly impressed. But we can say that it does work and works well and that we are never out of touch with our work which is the great stumbling block to doing good and successful work.

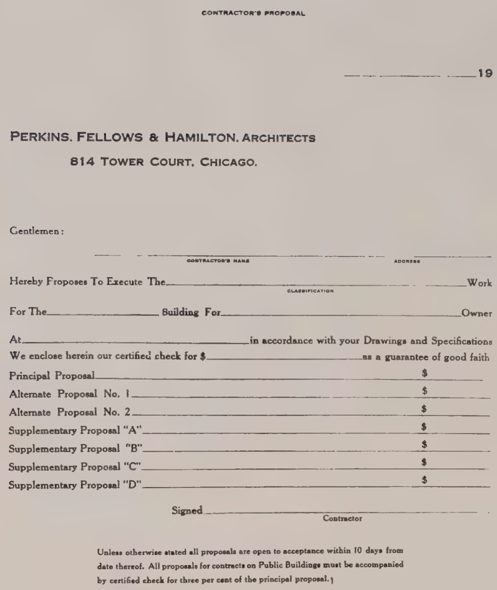
By M. Nirdlinger, of the Firm of Nirdlinger & Marlier, Architects, Pittsburgh, Pa.

REGARDING our office methods of handling the various building operations, would state our first procedure is to obtain complete data regarding the building site, after which we have our first real conference with the client. Preliminary drawings are then prepared, blue print or white print copies being submitted client from time to time with all notations, changes, etc., noted on the prints which we keep for our records. This method is carried on until the completed drawings and specifications are ready for the taking of estimates. If it is found necessary to make revisions which do not materially change drawings and specifications after estimates have been submitted we make up an addenda to specifications and obtain additional estimates. The addenda becoming part of the contract permits us to make necessary notations on drawings after estimates are received. If the changes are very complicated we, of course, revise drawings before taking new estimates. After contract is once let, all instructions sent contractors, including all extras, credits, changes no charge, etc., are made up with three carbon copies in addition to original, the original being sent to contractor, one copy to client, one copy for drafting room record, and one copy for filing. We have found this method most important as it eliminates all misunderstandings at the close of the operation.

We have found it of great help to present each client with a filing case of similar divisions to our office forms, so their records check with ours. The forms used are as follows: Contracts, Extras, Disputed extras, Credits, Disputed credits, Certificates for clients, Payments on account, Changes no charge, Instructions sent contractors, Written complaints account of slow progress, Written complaints account of bad work and material, Written complaints, general, Written complaints for back charge, Notices, three days and others, Disputed items, Unfinished and unaccepted items, Architect to Contractor, Contractor to Architect, Archiect to Subcontractors, Subcontractors to Architect, Changes ordered by Owner, Client to Architect, Architect to Client. Estimates for changes, etc., refused, Refused estimates, Architect to agents account of materials, Receipts for drawings, Miscellaneous.

By the above system all orders from client to contractor pass through this office, contractor obtaining written orders from this office for all changes. This feature eliminates carelessness on the part of the Architect, Contractor and Owner, as the verbal agreements that are a common practice always cause disagreements later on.

Regarding drafting room operation, we have separate files for all sketches, and ¼-inch drawings, details are all numbered, listed, and filed according to their numbers. Receipts are obtained from Clients and Contractors for all drawings issued. Head draftsman has his filing case for each operation, he makes records of all changes from outer office correspondence, these records being used in making up all details, revised drawings, etc. Upon completion of the operation correspondence, scale drawings, sketches, and details are catalogued and filed, making immediate reference possible at any time.



CONTRACTOR'S PROPOSAL

______ 19

PERKINS, FELLOWS & HAMILTON, ARCHITECTS
814 TOWER COURT, CHICAGO.

Gentlemen:

______ CONTRACTOR'S NAME ______ ADDRESS

Hereby Proposes To Execute The ______ CLASSIFICATION ______ Work

For The ______ Building For ______ Owner

At ______ in accordance with your Drawings and Specifications

We enclose herein our certified check for $ ______ as a guarantee of good faith

Principal Proposal	$
Alternate Proposal No. 1	$
Alternate Proposal No. 2	$
Supplementary Proposal "A"	$
Supplementary Proposal "B"	$
Supplementary Proposal "C"	$
Supplementary Proposal "D"	$

Signed ______ Contractor

Unless otherwise stated all proposals are open to acceptance within 10 days from date thereof. All proposals for contracts on Public Buildings must be accompanied by certified check for three per cent of the principal proposal.)

Form Used in the Office of Perkins, Fellows & Hamilton, Architects, Chicago, Ill.
Size 8½ in. x 11 *in.*

By John V. Van Pelt, Architect, New York City.

ARCHITECTURAL offices are usually run on one or the other of two different plans. Under one of these plans the same man works up up the early sketches, has charge of the working drawings, details, possibly the specifications and even the superintendance of the job all the way through. Under the other plan there is a sketch division, working drawing division, detailing division, etc., a special specification writer and special outside superintendents. There has been much complaint of the second system among draftsmen on the ground that they individually become mere cogs in a large machine and never learn anything outside of the monotonous routine of the special work alloted them.

My own office is run on the first system. I believe it is better because there is less likelihood that different branches of the organization will fail to interweave and that there is more probability that the initial intention in the design will eventually find expression in the construction. Those who believe in the second system, sometimes called the "factory system" claim that the first method is more costly to the architect. I do not believe this.

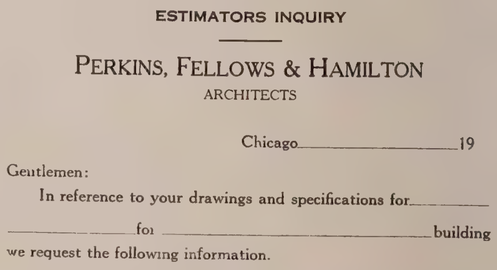
Distinctive features in my own office are that I perform a large amount of work on each building myself, making the original design, usually laying out the most important quarter-scale plan, writing the specifications and superintending the construction. Thus I have intimate knowledge of what is being done. I handle a fairly large amount of work the majority of which is institutional, tuberculosis sanatoria, schools and churches taking first place. The Gennadion, which Mr. Thompson and I are now building in Athens by day's labor, is primarily monumental.

The disadvantages of the system that I follow are twofold; if there are faults in the plans or construction, or if the design be bad, it is entirely my fault. Moreover, to practice architecture in this way means that I have a long and strenuous working day.

The point that is not covered in my organization is a member of the firm whose special activity would be largely social, meeting and securing new clients, etc. Futhermore, every office needs an advertising manager, and that I lack. My work comes almost entirely through earlier executed work, a necessarily slow process. However, this has resulted in a steady and increasing volume. My charges are made on either the percentage basis or a time basis. Clients pay for all prints. In calculating the cost of a building for a percentage charge, no deduction is made for omission from contracts for which the drawings and specifications have been prepared, but extras are added in computing this cost. A monthly statement is prepared in the office and the overhead is calculated in proportion to the drafting hours that have been recorded daily during the month. Each drafting hour has added to it an overhead which varies from seventy-five cents to a dollar and a quarter, as the volume of work in the office changes.

Time cards are filed for each day's work on each job so that each card has noted upon it the number of hours of each draftsman employed on the job, any extra expenses, travelling expenses, etc., and notes which eventually make a diary of the job.

I have found this system of the greatest value and believe that it is unusual. My office very seldom enters competitions.



ESTIMATORS INQUIRY

PERKINS, FELLOWS & HAMILTON
ARCHITECTS

Chicago ______ 19

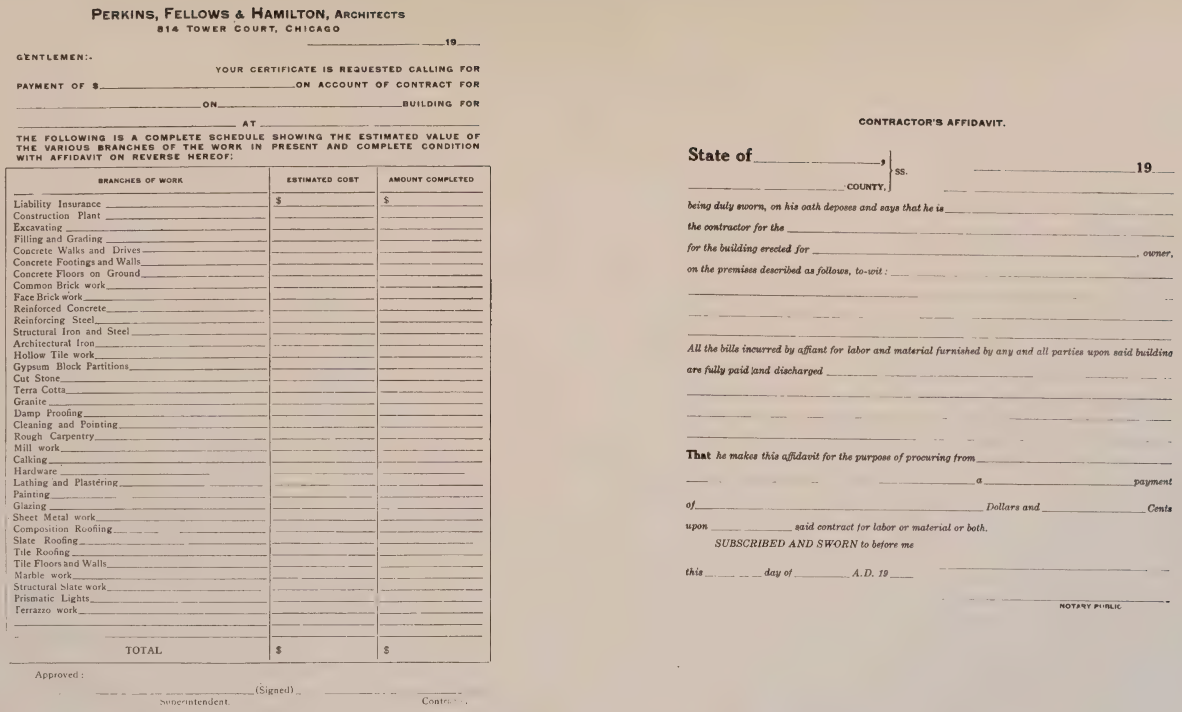
Gentlemen:

In reference to your drawings and specifications for ______

______ for ______ building

we request the following information.

Form Used in the Office of Perkins, Fellows & Hamilton, Architect, Chicago, Ill.



Perkins, Fellows & Hamilton, Architects
814 TOWER COURT, CHICAGO

________________19___

GENTLEMEN:-

YOUR CERTIFICATE IS REQUESTED CALLING FOR PAYMENT OF $____________ON ACCOUNT OF CONTRACT FOR ____________ON____________BUILDING FOR ____________ AT ____________

THE FOLLOWING IS A COMPLETE SCHEDULE SHOWING THE ESTIMATED VALUE OF THE VARIOUS BRANCHES OF THE WORK IN PRESENT AND COMPLETE CONDITION WITH AFFIDAVIT ON REVERSE HEREOF:

BRANCHES OF WORK	ESTIMATED COST	AMOUNT COMPLETED
Liability Insurance	$	$
Construction Plant		
Excavating		
Filling and Grading		
Concrete Walks and Drives		
Concrete Footings and Walls		
Concrete Floors on Ground		
Common Brick work		
Face Brick work		
Reinforced Concrete		
Reinforcing Steel		
Structural Iron and Steel		
Architectural Iron		
Hollow Tile work		
Gypsum Block Partitions		
Cut Stone		
Terra Cotta		
Granite		
Damp Proofing		
Cleaning and Pointing		
Rough Carpentry		
Mill work		
Calking		
Hardware		
Lathing and Plastering		
Painting		
Glazing		
Sheet Metal work		
Composition Roofing		
Slate Roofing		
Tile Roofing		
Tile Floors and Walls		
Marble work		
Structural Slate work		
Prismatic Lights		
Terrazzo work		
TOTAL	$	$

Approved:

____________ (Signed) ____________
Superintendent. Contractor.

CONTRACTOR'S AFFIDAVIT.

State of____________, } SS. ____________19___
____________COUNTY, }

*being duly sworn, on his oath deposes and says that he is*____________

the contractor for the ____________

for the building erected for ____________, *owner,*

on the premises described as follows, to-wit: ____________

All the bills incurred by affiant for labor and material furnished by any and all parties upon said building are fully paid and discharged ____________

That *he makes this affidavit for the purpose of procuring from*____________ ____________*a*____________*payment of*____________*Dollars and*____________*Cents upon* ____________ *said contract for labor or material or both.*

SUBSCRIBED AND SWORN to before me

*this*______*day of*______*A.D. 19*___ ____________

____
NOTARY PUBLIC

Form Used in the Office of the Perkins, Fellows & Hamilton, Architects, Chicago, Ill.

Face and Reverse of Contractor's Application for Payment.

It is my belief that work in the office is improved by a pervading atmosphere somewhat akin to that of the studio. Instead of a time clock to be punched when the men come in and a docking of their time, I have always allowed considerable liberty in that respect. Draftsmen are paid by the hour instead of by the week and this is made clear and taken into consideration when they enter the office and their salary is determined. It means that they do not receive pay during vacations and receive special overtime at a higher rate only when asked to come at a sacrifice. I believe that the practice of discharging draftsmen without previous adequate warning is unfair and vicious. I like musically inclined draftsmen, although I find that they will not let me sing in the drafting room.

By Peter B. Sheridan, Architect, Hazelton, Pa.

SPEAKING from the viewpoint of the smaller office, we believe that it is a big advantage for the small office to have an association of two men. One (*A*) handling the soliciting, superintendence and specifications, while the other (*B*) has charge of the drafting, office management and trade interviews. This division of responsibility will work out fairly for both men. It is practically impossible for one man to manage all thoroughly and it is a rare thing to find a draftsman who will assume responsibility and take the personal interest in the firm's business that an associate will.

Assuming that we have a building, *A* having solicited this work and closed the contracts (we use the A.I.A. contracts, having found our client and his lawyer more in sympathy with this form than any original one that we could devise among ourselves). Next an interview is arranged so that *B* will meet the client and become familiar with the requirements. Following this, *A* and *B* will discuss the problem in detail and various schemes are tried until some definite solution is obtained. The client being satisfied with the final solution, *B* assumes full charge of the job, further discussions of the project occurring as the work progresses. Any draftsmen that are required will be under *B*'s supervision. At the same time *A* is writing the specifications, working in parallel with *B*, this method helping to avoid errors of omission and mistakes on both the drawings and specifications. Upon completion they check each other's work.

We might add that a small office should never consent to drop below the recognized percentage fee. Judging by the present cost of a well studied and drawn set of plans, it would be impossible to spend the required amount of time on the study of the problem if the fee were cut. It is only natural that the finished work will suffer by this cheapening procedure.

If an association of this type is to be successful each man must be capable of holding up his end of the work and each must have absolute faith and confidence in the other.

By Rankin Kellogg & Crane, Architects, Philadelphia, Pa.

IN reply to your request we would say that our practice has not seemed to lend itself to the use of stereotyped forms. Our work has been so varied and has been so largely for government, state, county and municipal or related boards where certain prescribed forms have been obligatory that we have found it more advantageous to handle each job along its own particular lines. The fact also that our work has generally consisted of a comparatively small number of large operations, rather than a large number of smaller projects that could be handled in a routine way, has not encouraged the use of forms. Meetings with clients or committees are always made a matter of record by an account of the proceedings as understood by us and prepared as soon after the conferences as possible. Copies are sent to the clients or committees and we are governed accordingly unless notified to the contrary. It is difficult to see how any form could be devised to cover records of this kind and yet we regard them as of primary importance. The same is true of superintendents' and inspectors' reports. The projects we have had in hand have varied so that if any special forms seem desirable they are prepared for each operation

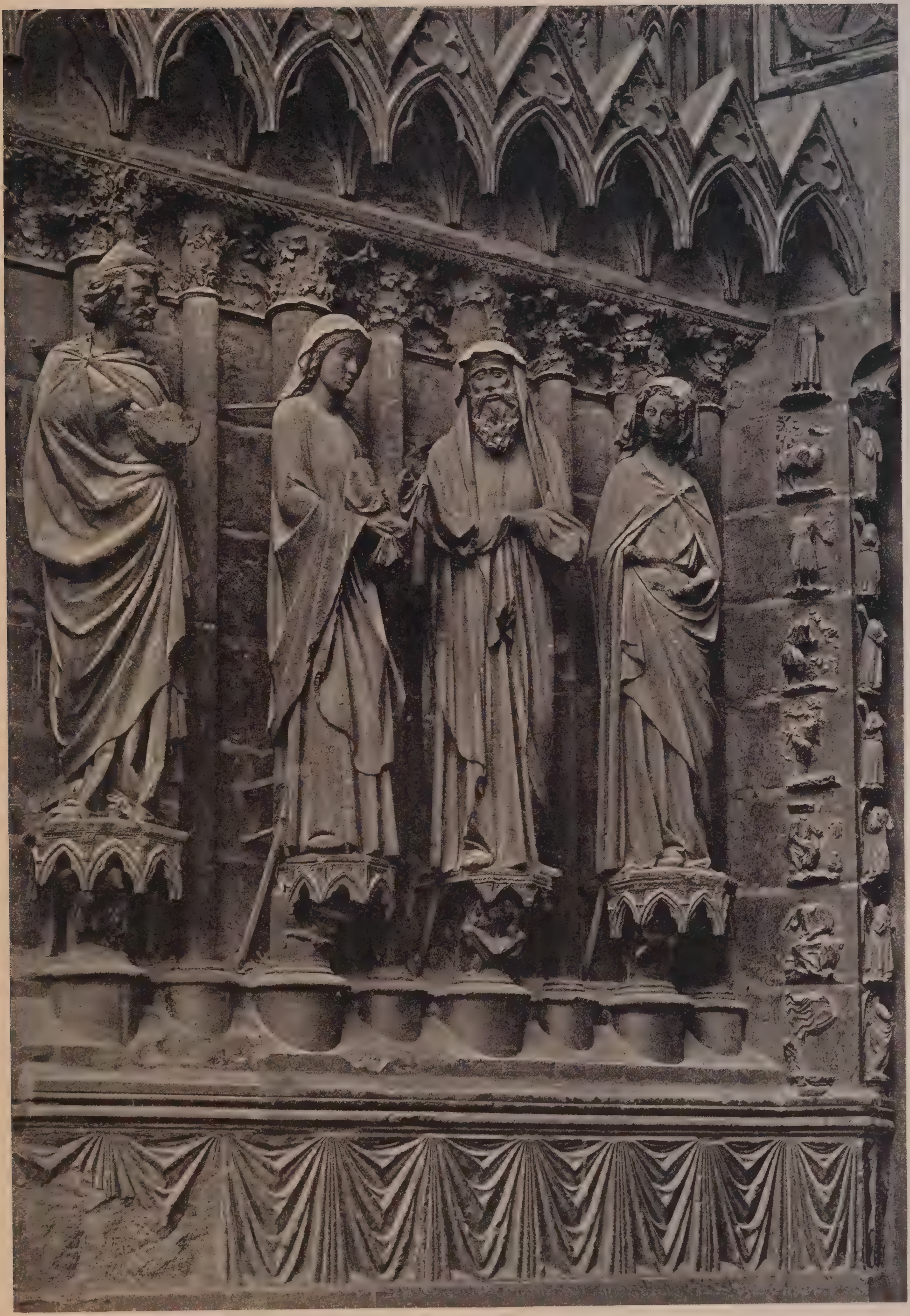
We enclose herewith a copy of our certificate form and our form for special order. In the latter the circumstances and conditions of each particular order are set forth in considerable detail and the copy going to the contractor as well as the copy retained by ourselves is signed by the owner unless the exigency of the case prevents.

By J. W. Dolliver, Architect, San Francisco, California.

IN my practice of Architecture I have selected a type of practice which I might class as personal, in contrast with a large office which carries on an organization practice. My method is fraught with the same impediments as others where the practice is either a feast or a famine, but strange to say, the more the rush the better the system is kept up. Every morning this is attended to in transit to the office, as I am a commuter. Briefly outlined the system is as follows:

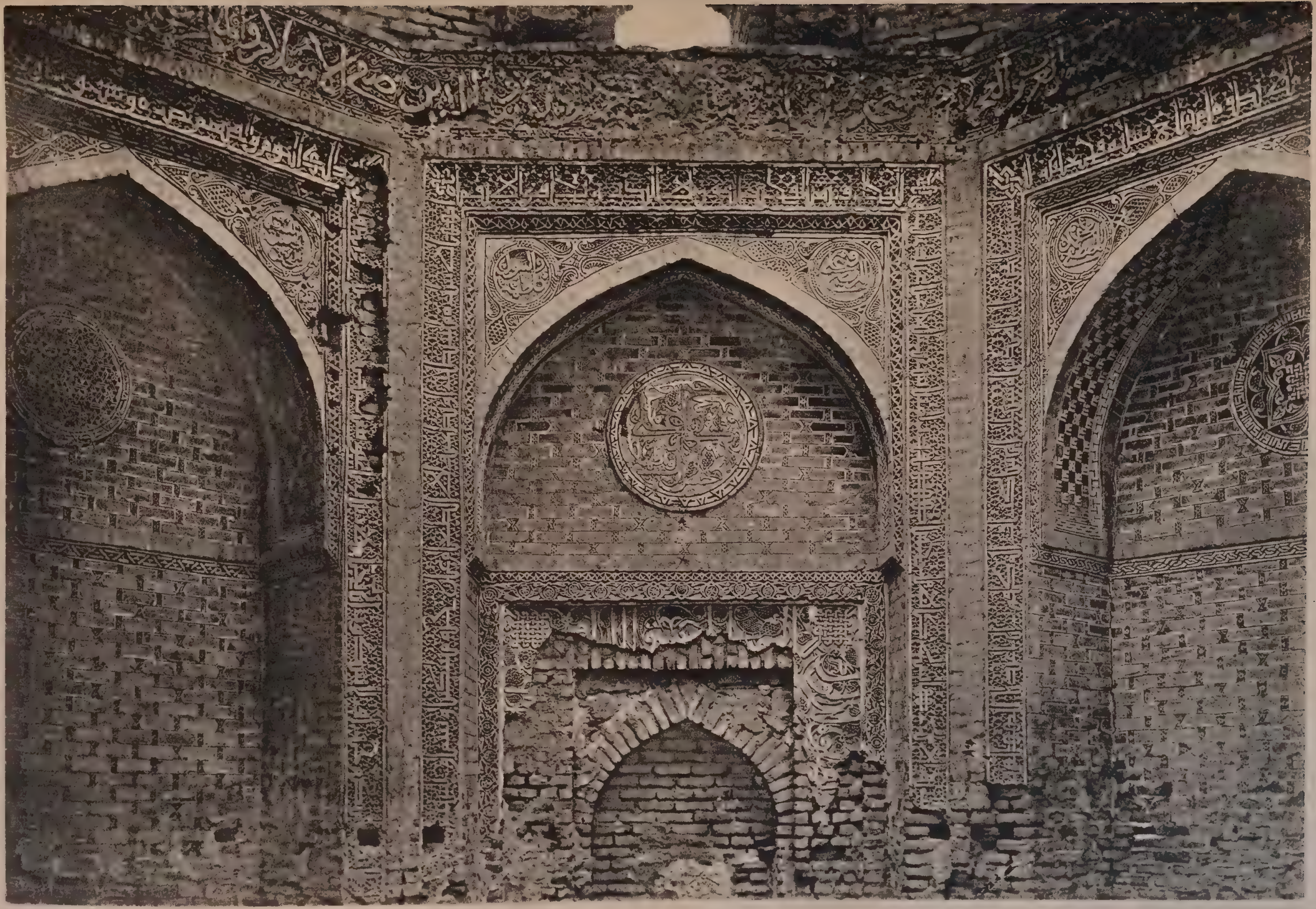
Record of Practice:—I have a Lefax filing pocket book arranged with daily calendar, addresses, 1/8" sectional ruled pages and alphabetical index where all notes are dated and lettered fom the date of meeting with the client right through superintendence. Journal ruled pages keep the accounts of contracts and payments. Page for Contractors and Sub-contrac-

(*Continued on Page 68a*)



DETAIL OF PORTAL, ROUEN CATHEDRAL
FROM "SELECTED MONUMENTS OF FRENCH GOTHIC ARCHITECTURE"

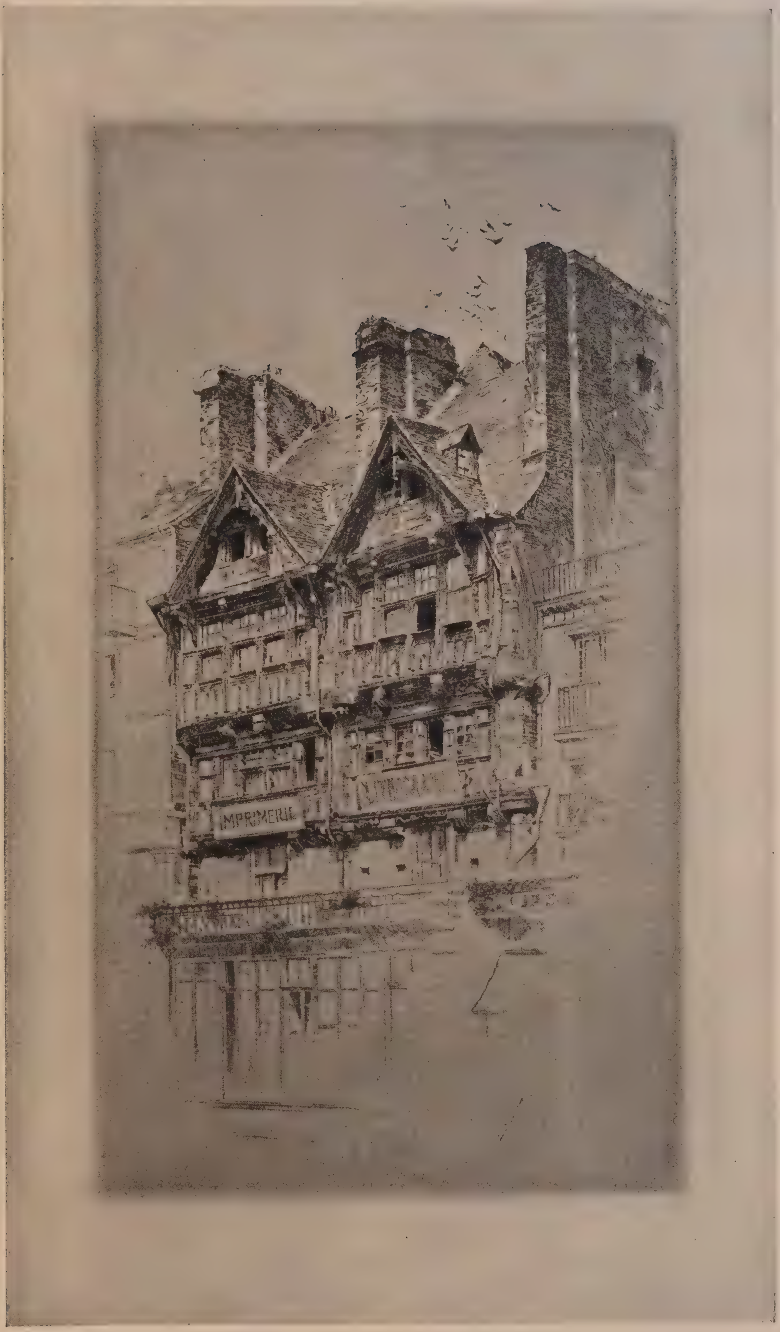
The delightful character of the sculptured detail, both in the figures and in the architectural ornament, is well shown in the photograph reproduced on the other side of this page. This is one of the plates in "Selected Monuments of French Gothic Architecture" which is being brought out by the publishers of PENCIL POINTS.



PERSIAN FAIENCE

FROM SARRE'S "DENKMAELER PERSISCHER BAUKUNST."

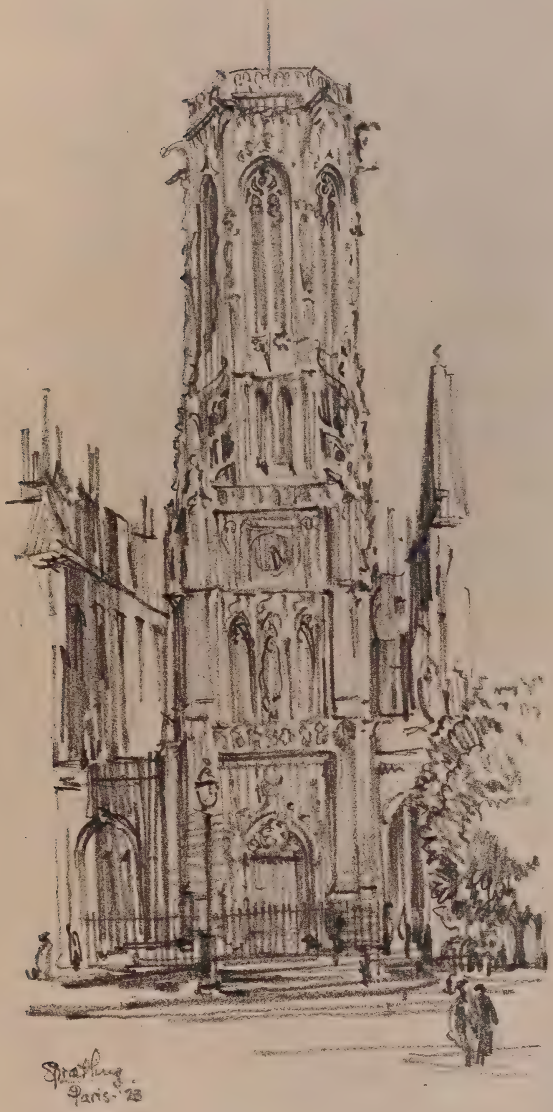
The faience of Persia is especially worthy of study because it embodies principles which can be applied in the designing of polychrome decoration in other styles. Its beauty always attracts, even though the style is limited in its usefulness in present day practice in this country. Sarré's book, from which the plate on the other side of this sheet is reproduced, contains a rich store of this material.



Courtesy of The Randolph Collections

ETCHING BY JOHN TAYLOR ARMS, "THE TWINS"

The etching by John Taylor Arms, which is reproduced on the other side of this sheet, is one of the most interesting of the many etchings in his "gable series." The light and shade on the various surfaces and the texture of the materials have been well studied and well rendered, making a very pleasing presentation of an interesting architectural subject as well as an etching that is especially good from a pictorial standpoint.



PENCIL SKETCH BY WM. P. SPRATLING

The pencil sketch reproduced on the other side of this sheet is one of those made by William P. Spratling on his sketching trip in Europe during the past summer. It is especially worthy of study from the standpoint of technique, for it very successfully renders the richness and tenderness of the old stonework and does this in a masterly way.

THE SKETCH PROBLEM, PART II

The First Preliminary Competition for the Paris Prize

BY JOHN F. HARBESON

In this article Mr. Harbeson treats the sketch problem in the same manner in which he has discussed other problems in the pages of this journal under the general heading "The Study of Architectural Design."

THE first preliminary competition is different from the regular sketch problem in one important particular—only five are placed. It is not enough to make a good sketch—it must be one of the five best, and as the competition is keen this sometimes results in an exceedingly high standard. And just as in sprinting, if you seriously intend to win a race in a meet, you will go into regular training to develop your muscles and your control over them, and to increase your "wind," so that by the date set for the race you are absolutely "in condition;" so, too, it is possible to train for the Paris Prize Preliminary.

This can be done by taking a problem each week, for a number of weeks—programs of former preliminary competitions may be used. Most of these have been published in the architectural magazines and may be found in the reference libraries. Take the problem in every respect—except one—as if you were taking the Preliminary itself; work "en loge"—that is, use no documents, no criticism, no help. The exception mentioned above is as to the time. It might not be possible to take a number of such problems in the time usually alloted to a Paris Prize Preliminary, if the whole number of hours had to be spent consecutively, without undermining one's health to such an extent as to jeopardize the chances for success in the event itself.

This would apply more particularly to the Second Peliminary, a forty-eight hour problem: it is even more necessary to "train" for the "second prelim," and training by means of a number of similar problems is of even greater value in this case. But even one forty-eight hour sketch problem is a severe strain on one's stamina because of the intense nervous effort required, to say nothing of the loss of sleep and lack of regularity in eating; a series of such efforts would be ruinous to the stoutest constitution. A glance at some of the successful problems in these competitions, of which Fig. 19 is an example (by D. M. Kirkpatrick, winner of Paris Prize 1912) will show that to draw as many individual lines as are shown, necessitates a high average of lines per minute, in the time left after the parti has been found and studied, and the arrangement of the masses, of the axes, and the character of the representation have been decided upon.

For these training problems it is sufficient to use the proper number of hours, and not to use them consecutively—to divide this number into shorter periods so that the usual habits of life are not disorganized and nervous vitality is not dissipated.

If you can get some one else to go through this training with you, there will be an added benefit for both in development: the more the better.

After each such trial get what criticism you can on your effort—from the Patron, from men who have had the Beaux Arts training, and especially from "Logists" in a previous Paris Prize competition, who, therefore, have had some success in preliminary competitions. Look, then, at the published solutions of these former programs: incidentally you should not look at these solutions before making the esquisse—that is, if you expect to get any real value from the effort.

With such a method of training you will be astonished at the improvement in your own work after taking ten or twelve problems of this kind.

And when you come then—after this training—to take the preliminary competition itself, make use of this training as much as possible. Stick to the technique, the medium, you have found greatest success in using; watch the disposal of your time so that the preliminaries (the finding of a parti, the study of the composition of the sheet, the blocking out of the masses of your solution) will not eat too much into the time necessary for the presentation.

And in this final effort—the "Preliminary Competition" itself—you must drive yourself hard, use every pound of "steam" you have to get the best that is in you "across." This is no time to pamper yourself, to hang back from a supreme effort: rest tomorrow—eat tomorrow—play tomorrow. Today get the d—— thing done, and get it done well, just as well as you are capable of doing a thing of this kind.

And if you miss it, if you do not "place," do not forget that there is another competition a year later, and start in at once to get ready for it, to "go in training" so that the results will be different in that competition.

It is interesting to examine the problems which have been "placed" in a Paris Prize Competition. That shown in Fig. 14, also by D. M. Kirkpatrick, shows the value of directness, especially in the plan. Everything is "nailed out;" there is no indecision anywhere. In any good sketch you see evidence of the attitude that, once the design has been decided upon, there is never again any hesitancy about design

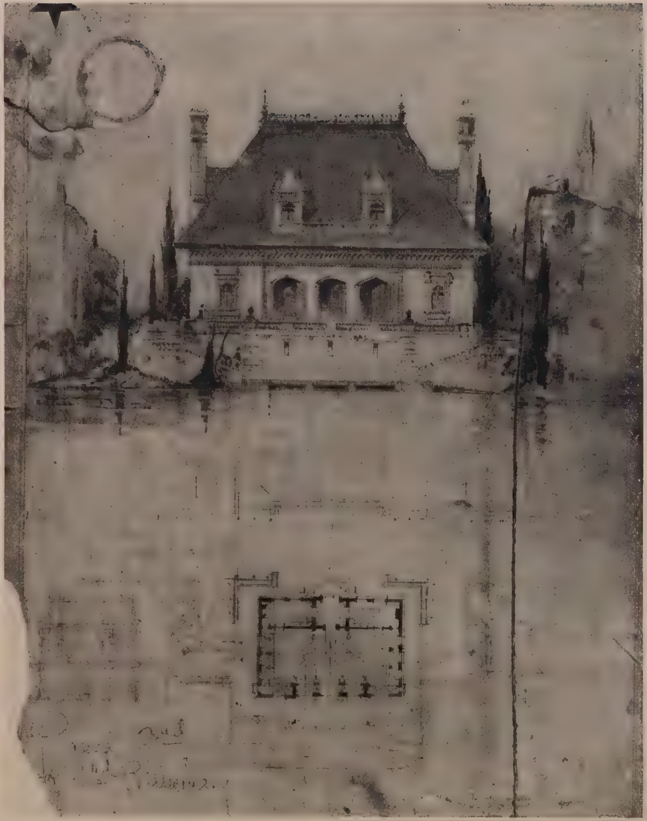


Figure 19. Design by D. M. Kirkpatrick for "The Court of Honor of an Exposition." Second Preliminary Competition, Paris Prize, 1912.

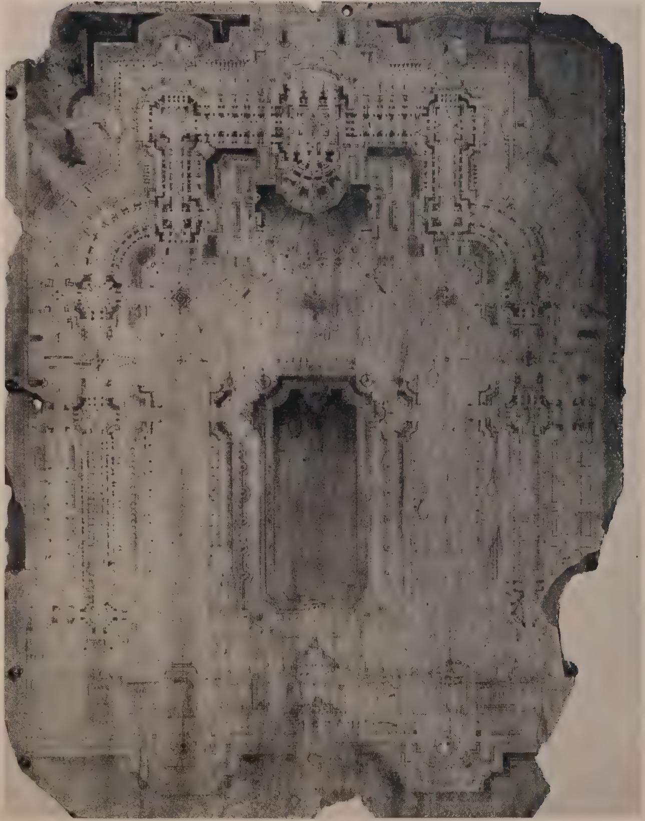


Figure 14. Design by D. M. Kirkpatrick for a Water-gate in a Park. First Preliminary, Paris Prize Competition, 1912.

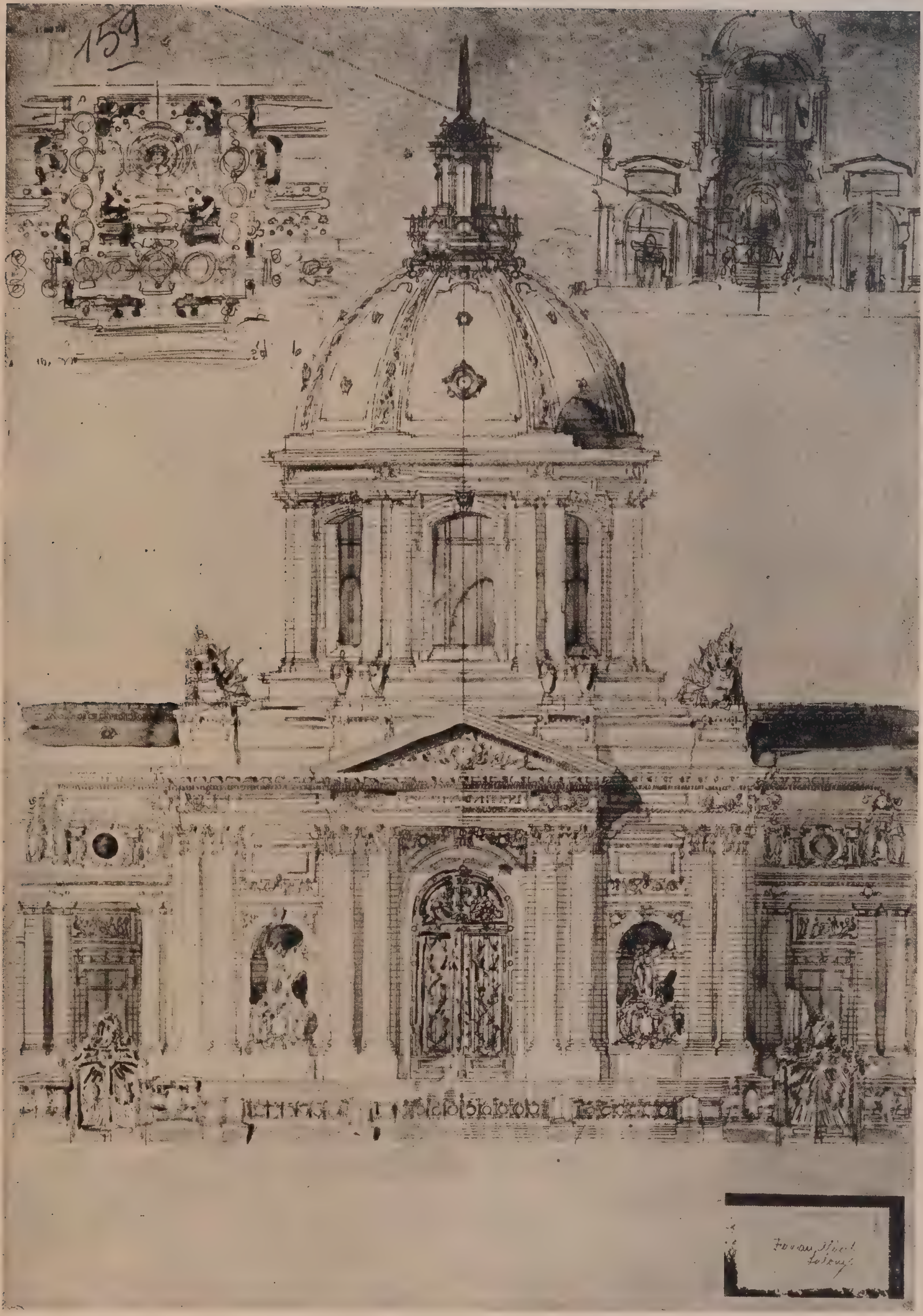


Figure 17. Design by M. Albert Ferran, Pupil of M. Laloux, for "Le Pavillon Central d'un Palais de l'Institut." First Preliminary Competition, Prix de Rome, Ecole des Beaux Arts.

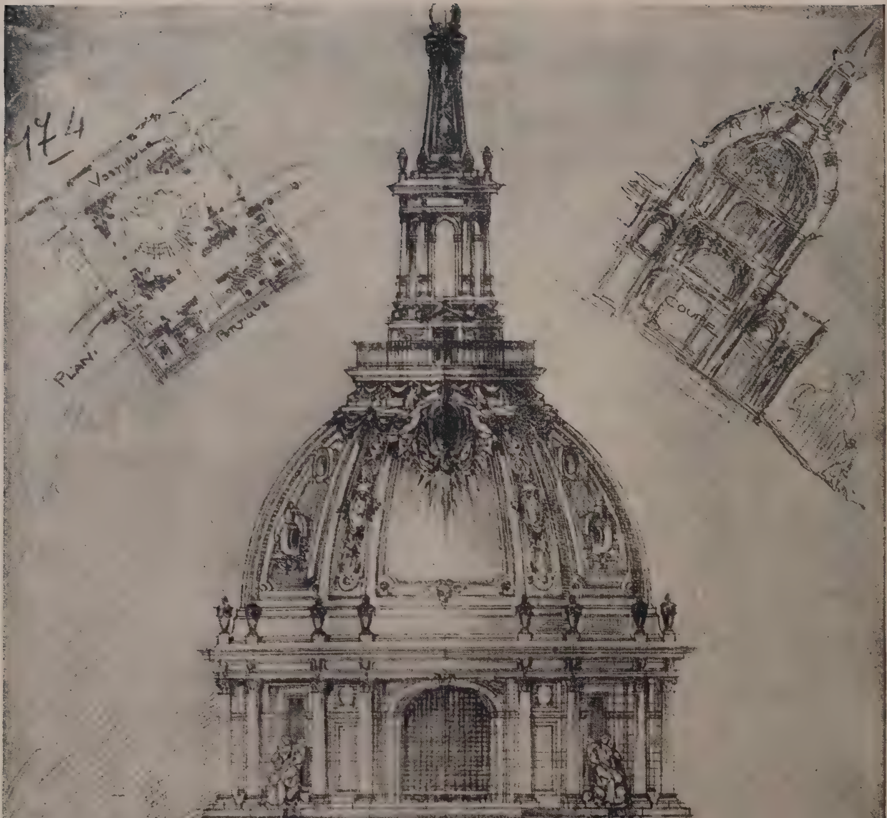


Figure 18. Design by M. Courrèges, Pupil of M. Bernier for "Le Pavillon Central d'un Palais de l'Institut." First Preliminary Competition, Prix de Rome, Ecole des Beaux Arts.

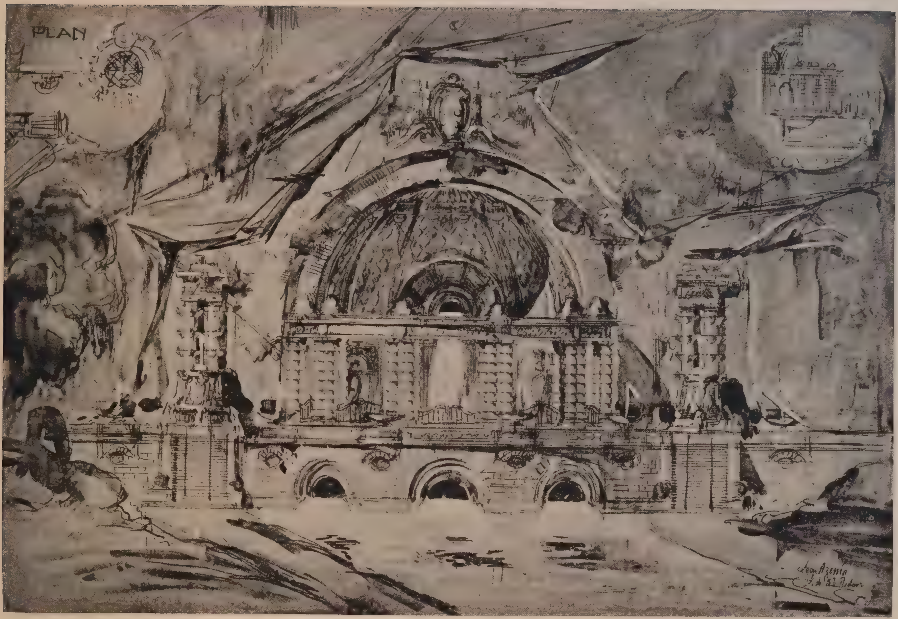


Figure 20. Design by M. Azéma, Pupil of M. Redon, for "Un Monument à la Source d'un Fleuve." First Preliminary Competition, Prix de Rome, Ecole des Beaux Arts.

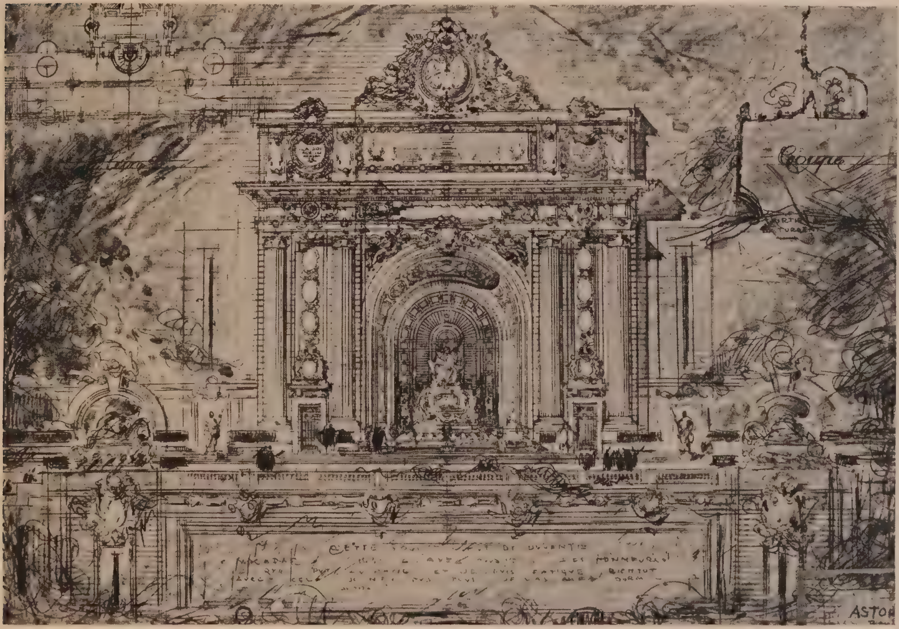


Figure 21. Design by M. Astorg, Pupil of M. Bernier, for "Un Monument à la Source d'un Fleuve." First Preliminary Competition, Prix de Rome, Ecole des Beaux Arts.

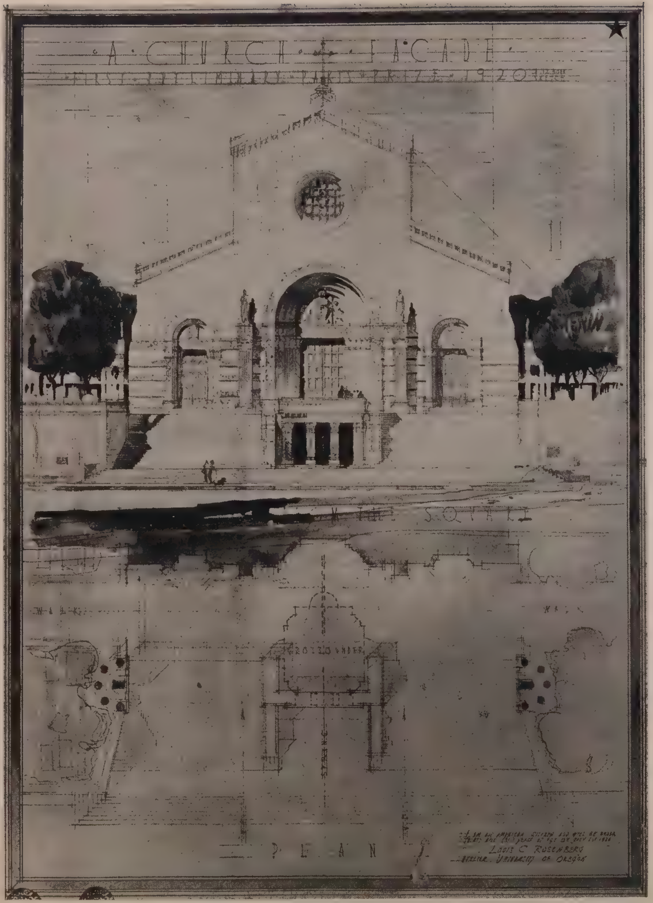

A·CHURCH·FACADE·
FIRST PRELIMINARY PARIS PRIZE 1920
SQUARE
PLAN
LOUIS C ROSENBERG
ATELIER. UNIVERSITY OF OREGON

Figure 16. Design by Louis C. Rosenberg for "A Church Façade." First Preliminary, Paris Prize Competition, 1920.

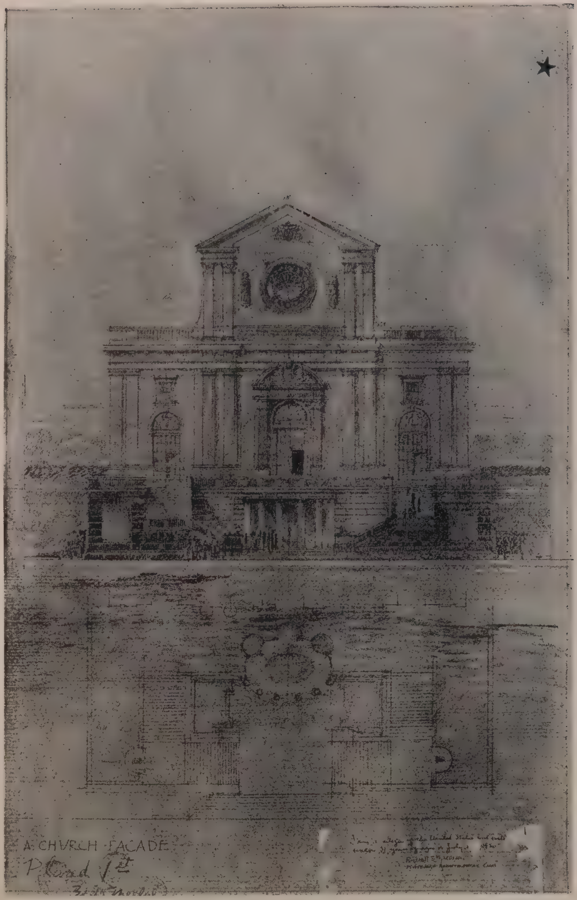


Figure 15. Design by Russell S. Simpson for "A Church Façade." First Preliminary, Paris Prize Competition, 1920.

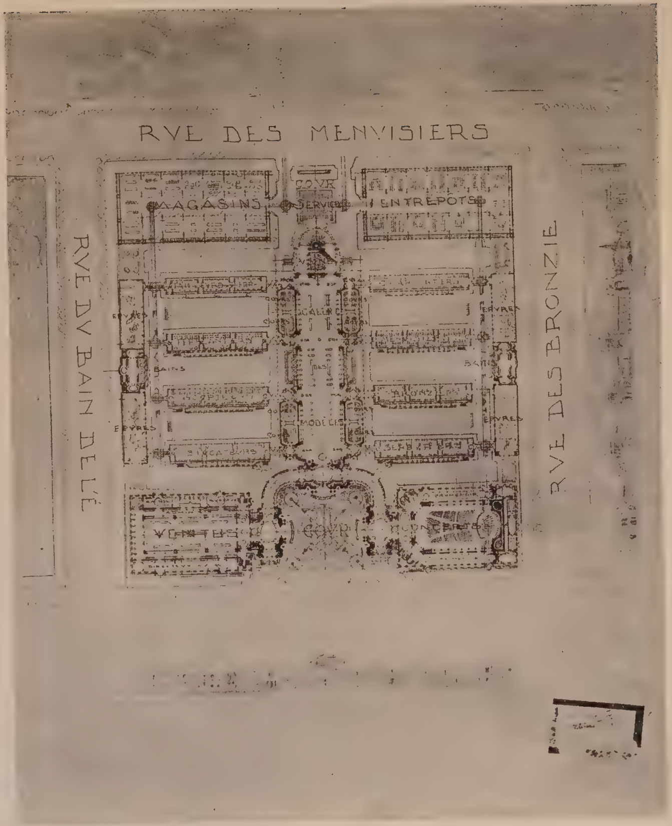


Figure 23. Design by M. Chaurés, Pupil of M. Pascal, for "Une Ecole Professionelle d'Apprentis dans Une Grande Ville." Twenty-four hour sketch problem. Ecole des Beaux Arts.

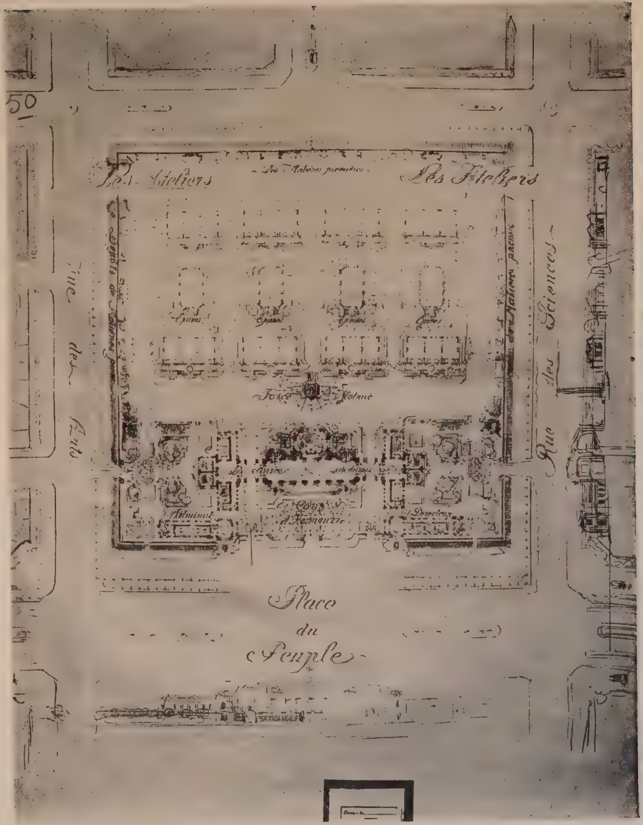


Figure 22. Design by M. Tournon, Pupil of MM. Sellier de Gisors and Bernier, for "Une Ecole Professionelle d'Apprentis dans Une Grande Ville." Twenty-four hour sketch problem. Ecole des Beaux Arts.

or parti; they are accepted as good, and presented as directly and forcefully as possible. In this case (Fig. 14) center lines and snap lines are partly responsible for this feeling of directness, and the use of T-square and triangle is much in evidence. Figure 8 (December Pencil Points) is very similar in draftsmanship and indication. Both of these are decidedly deserving of the name "Sketch."

Quite different is Figure 7 (December Pencil Points), which, although a successful preliminary first entry, looks much like a finished drawing, the lines are so carefully indicated, the profiles and intersections of lines so neatly drawn. But this was a simpler problem, and the parti chosen was a simple solution for this program. This made it possible to spend more time on the presentation, which has been very effectively done and with a great deal of cleverness, even though at first glance it seems quite simple.

Half way between these as to care of draftsmanship, but equally effective as to the success of its presentation are two of the successful drawings in the first preliminary competition of 1920, a "Church Façade," Figures 15 and 16.

It is interesting to compare these with two rather similar French examples submitted in the First Preliminary Competition for the Prix de Rome at the Ecole des Beaux Arts, Figures 17 and 18, for a "Central Pavilion for a Building for the Institute." Each of these is more decidedly a sketch problem than the American examples.

Even more distinctly partaking of the sketch problem idea are two other first preliminary drawings at the Ecole, for "Un Monument à la Source d'un Fleuve," Figures 20 and 21. And yet how much these differ from each other! The latter is full of hard lines—the T-square and triangle are very much in evidence, with free-hand used only for ornament within or against hard lines. In the former there is little evidence of the T-square and triangle—only a few big axis lines have been laid out mechanically, while everywhere are free-hand lines. Yet each is equally successful in expressing a solution of the program; each was chosen to enter the second preliminary competition.

It is interesting to note that there may be the same variation in good plan sketch problems. Figures 22 and 23 were solutions for "Ecole Professionelle d'Apprentis dans Une Grande Ville," a twenty-four hour sketch problem. That by Chaurés (Fig. 23) is mechanical in its technique (though not in its final appearance), most of the lines have been drawn with T-square and triangle, even much of the smaller indication was done mechanically, and this assemblage of mechanical lines is then dressed up with free-hand work. Tournon's solution (Fig. 22) shows a use of T-square and triangle for only the first layout of the lines—the final presentation is apparently all free-hand. And both of these problems were good; both of them were premiated.

This only goes to show that there is no one way of doing a sketch problem, no set formula; and that each man as he "arrives" adds his own personal touches to the different kinds of good presentation, even though he may have used ideas from one person here, from another there. In fact, the more he gets from many different men, the more apt is his own work to be personal, as being not too much like any one of them.

But in any case, whatever medium you use, whatever style you develop, you must present a clear "picture" of your idea. The time is short and your efforts should be focused on the presentation of the one idea.

SCHOLARSHIP COMPETITION IN INTERIOR DECORATION AND FURNISHING

A COMPETITION for American artists, enabling the winner to study in the Paris ateliers of the New York School of Fine and Applied Arts, is announced by Frank Alvah Parsons and a committee of judges which includes society leaders, architects, and decorators.

The scholarship, of $500, providing transportation to and from France, and one year's tuition, is offered to stimulate interest in interior decoration and architecture among the American people, and will be awarded to the American student of art and decoration who submits the best decorating and furnishing scheme for a five-room apartment.

The committee of judges includes: Mrs. Seymour L. Cromwell, Elsie Cobb Wilson, decorator; Mrs. Charles H. Sabin, Mrs. Alice Duer Miller, author; Miss Mary Kernochan, Francis Lenygon, decorator; William Delano, architect; Richardson Wright, editor; and Chamberlin Dodds, decorator.

The scholarship is offered by E. A. MacDougall, president of the Queensboro Corporation of New York, as a fitting stimulus to further the relation between art and the building industry. It will be known as the Jackson Heights Garden Apartment Scholarship.

The competition closes January 31, 1924. Plans should be presented to the secretary, J. Mitchel Thorsen, 9 East 46th Street, New York City.

THE SMALL HOME

THE November issue of *The Small Home*, published monthly by The Architects' Small House Service Bureau of the United States, Inc., at Minneapolis, Minn., contains, in addition to illustrations and descriptions of several small houses, a number of interesting articles, among which are the following: "Do Women Make Final Decisions on a Home?" by Maurice I. Flagg; "Demonstrating Building Conditions," describing and illustrating one of the three small demonstration homes completed recently by the Northwestern Division of the Bureau for the *Minneapolis Journal;* and "Sentiment vs. Smoke," on how to design fireplaces that will not smoke.

(*Continued from Page 52h*)

tors' addresses and telephone numbers and pages for office expense and time. My own time sheet for the month is at the back with various buildings noted with hours per day on each. This method keeps all data in compact form easily referred to.

Preliminary Drawings:—These are kept, also all notes until work is entirely paid for. It is sometimes interesting in court or to a client who thinks your charge exorbitant.

Working drawings are laid flat in drawer until most prints are taken from them, then folded in a vertical file and divided into general drawings and full size details and numbered, and the name of drawing with number noted on outside of envelope. Office copy of specifications filed in the working drawing folder and written so it may be blueprinted.

In writing specifications on work where a specialist is not employed a member of the trade is called in to go over and advise as to up-to-date practice. For contracts and general conditions A. I. A. documents are used. A section in a vertical file contains one folder with contracts, one for letters and others for construction data, sub-contracts, etc.

At the end of the year these files are cleaned out and tied up together and filed away from the working part of the office.

By Alfred C. Bossom, Architect, New York City.

THE office organization that we have worked out over a period of many years has reduced itself down to a very simple form. Starting with myself, and of course I make it my business to enter into the activities of all of the office, we divide our activities into two main heads. One, the production of the drawings in the office under our head draftsman, Mr. Frederick J. Hartwig, and the other the preparation of specifications, the awarding of contracts, and supervision of all the work on the outside under our Office Manager, Mr. Arthur Zimm. We all three keep fully conversant with the work going on in the office, although our activities do not overlap, and we each have associated with us another member of the staff, so that in the event of any of us being absent, our individual activities continue without interruption.

Under the head draftsman there are immediately two assistants, Mr. Emil Capel and Mr. Anthony J. DePace, who have charge of the drafting room. It is their duty to receive the instructions and to see that same are carried out, to follow the work through in its various branches, to take up with others when clients' desires are known, or obtain any other information that may be required, and to see that it is given to the various persons working upon the drawings. They are also in possession of schedules giving the time when various drawings or information are needed on the jobs, and it is up to them to see that this is obtained. They also work in conjunction with Mr. Zimm, the Office Manager, under whose direction all specifications are prepared.

When instructions are given to draftsmen in charge of any particular building, one of these two assistants is always present, so as to have a duplicate system in all cases to prevent delays due to absence or illness. This generally covers the handling of the production of the drawings.

As regards the construction of the work in the field, the Office Manager's assistants keep him informed at all times as to the condition of the work both on the buildings and on the drawings, daily reports being received from every job, which one of these assistants examines and takes to all directly interested.

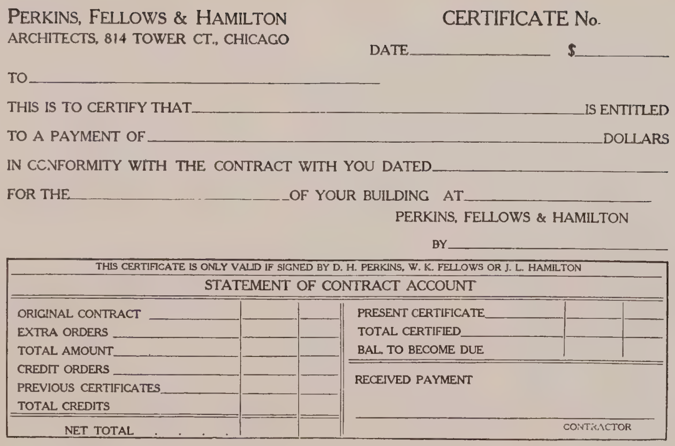
For all internal communications in the office we have very frequent conferences, relying more upon these than upon written instructions, although we keep written records of all matters of importance in the hands of all the interested parties.

In relation to the jobs themselves, we carry on quite a voluminous correspondence, perhaps larger than is necessary, but we have found that the more detailed information we have of the actual condition of the work on the building and from the factories where it is being fabricated, the condition of accounts, payments between the contractor and subcontractor, and data of that sort, the less trouble we have in giving our clients information which, in our judgment, they should always have, the easier the work runs. In a great many cases we send copies of all letters relating to matters between our office and the contractors to our clients for their record. And one of our rules from which we never deviate is, that there shall be no secrets from the clients, and if there are any awakenings to be had I insist that they come from my office before they shall arrive from any other source.

This of course is a very brief outline of our form of handling our work, but we have endeavored wherever possible to eliminate red tape, and get right to the heart of the situation; for an architect's function in my opinion is to use every legitimate method to carry out his clients' requirements in the most artistic and practical manner, and to do this in the most expedient and economical way.

When the drawings are nearing completion the preparation of specifications commences and at the same time the person responsible for the procurement of bids is notified as to the branches of work that are to be covered and is given the approximate dates when the drawings will be ready for blue printing. The bidding lists are then made up and inquiries are made of prospective bidders as to whether they wish to submit proposals, and when the drawings finally are completed the solicitation of bids is commenced at once.

At this stage of the work the drawings are not entirely complete as to dimensions or as to studies of ornament, interior decorations, or details of various points where several materials meet in a complicated manner. Nothing more is done on the drawings while the bids are being taken until after the contracts are awarded. The drawings then are checked over, the basis of contracts is definitely determined and the final completion of dimensions is made. Upon the



PERKINS, FELLOWS & HAMILTON
ARCHITECTS, 814 TOWER CT., CHICAGO

CERTIFICATE No.

DATE ____ $ ____

TO ____

THIS IS TO CERTIFY THAT ____ IS ENTITLED

TO A PAYMENT OF ____ DOLLARS

IN CONFORMITY WITH THE CONTRACT WITH YOU DATED ____

FOR THE ____ OF YOUR BUILDING AT ____

PERKINS, FELLOWS & HAMILTON

BY ____

THIS CERTIFICATE IS ONLY VALID IF SIGNED BY D. H. PERKINS, W. K. FELLOWS OR J. L. HAMILTON

STATEMENT OF CONTRACT ACCOUNT

ORIGINAL CONTRACT			PRESENT CERTIFICATE		
EXTRA ORDERS			TOTAL CERTIFIED		
TOTAL AMOUNT			BAL. TO BECOME DUE		
CREDIT ORDERS			RECEIVED PAYMENT		
PREVIOUS CERTIFICATES					
TOTAL CREDITS					
NET TOTAL			CONTRACTOR		

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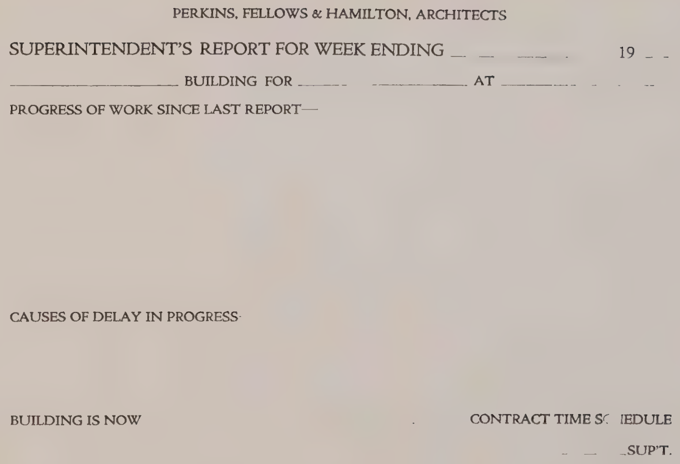


PERKINS, FELLOWS & HAMILTON, ARCHITECTS

SUPERINTENDENT'S REPORT FOR WEEK ENDING ____ 19 __

____ BUILDING FOR ____ AT ____

PROGRESS OF WORK SINCE LAST REPORT—

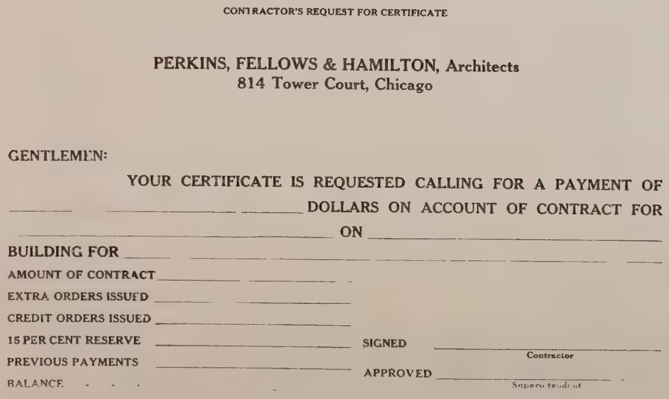
CAUSES OF DELAY IN PROGRESS

BUILDING IS NOW

CONTRACT TIME SCHEDULE

____ SUP'T.

Size 5 in. x 8 in. Blue Card.



CONTRACTOR'S REQUEST FOR CERTIFICATE

PERKINS, FELLOWS & HAMILTON, Architects
814 Tower Court, Chicago

GENTLEMEN:

YOUR CERTIFICATE IS REQUESTED CALLING FOR A PAYMENT OF ____ DOLLARS ON ACCOUNT OF CONTRACT FOR ____ ON ____

BUILDING FOR ____

AMOUNT OF CONTRACT ____

EXTRA ORDERS ISSUED ____

CREDIT ORDERS ISSUED ____

15 PER CENT RESERVE ____ SIGNED ____ Contractor

PREVIOUS PAYMENTS ____ APPROVED ____ Superintendent

BALANCE . . .

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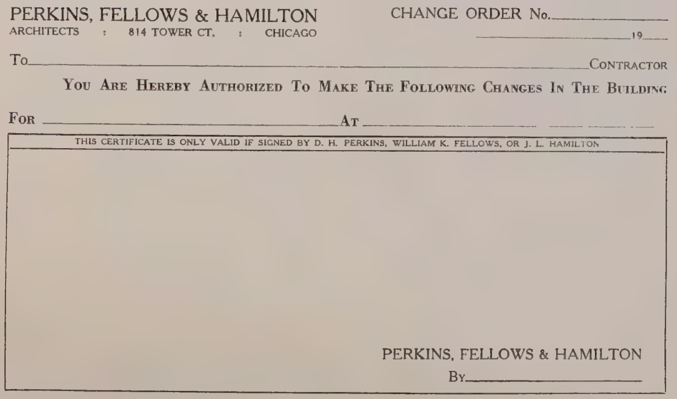

PERKINS, FELLOWS & HAMILTON
ARCHITECTS : 814 TOWER CT. : CHICAGO

CHANGE ORDER No. ____

____ 19 __

To ____ CONTRACTOR

YOU ARE HEREBY AUTHORIZED TO MAKE THE FOLLOWING CHANGES IN THE BUILDING

FOR ____ AT ____

THIS CERTIFICATE IS ONLY VALID IF SIGNED BY D. H. PERKINS, WILLIAM K. FELLOWS, OR J. L. HAMILTON

PERKINS, FELLOWS & HAMILTON

BY ____

Size 5 in. x 8 in. Gray Paper.

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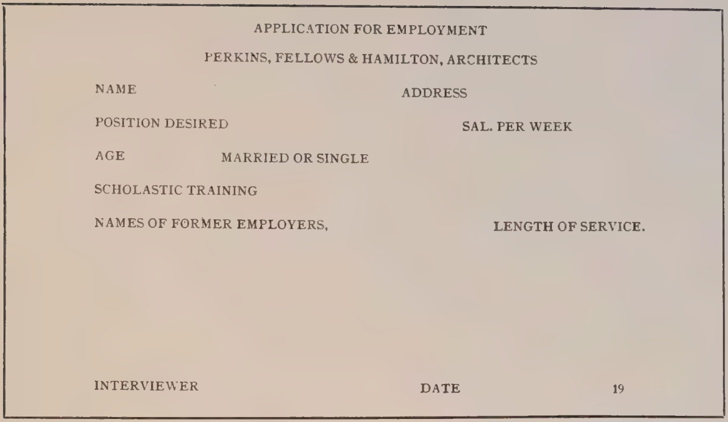


APPLICATION FOR EMPLOYMENT

PERKINS, FELLOWS & HAMILTON, ARCHITECTS

NAME ADDRESS

POSITION DESIRED SAL. PER WEEK

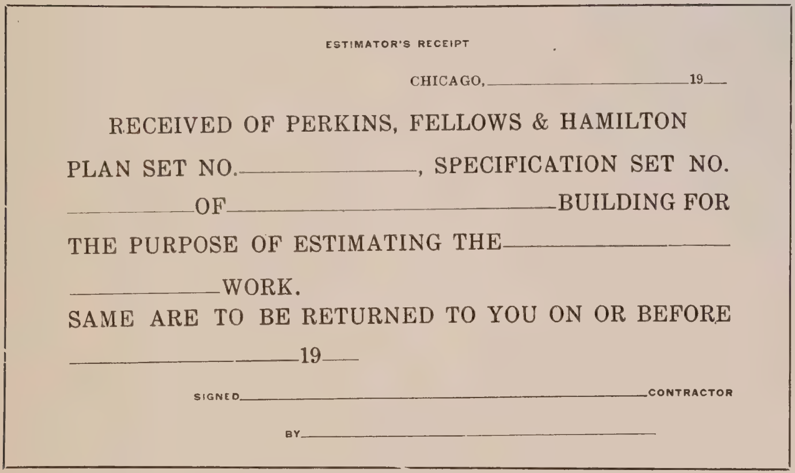
AGE MARRIED OR SINGLE

SCHOLASTIC TRAINING

NAMES OF FORMER EMPLOYERS, LENGTH OF SERVICE.

INTERVIEWER DATE 19

Cards, Size 3 in. x 5 in.



ESTIMATOR'S RECEIPT

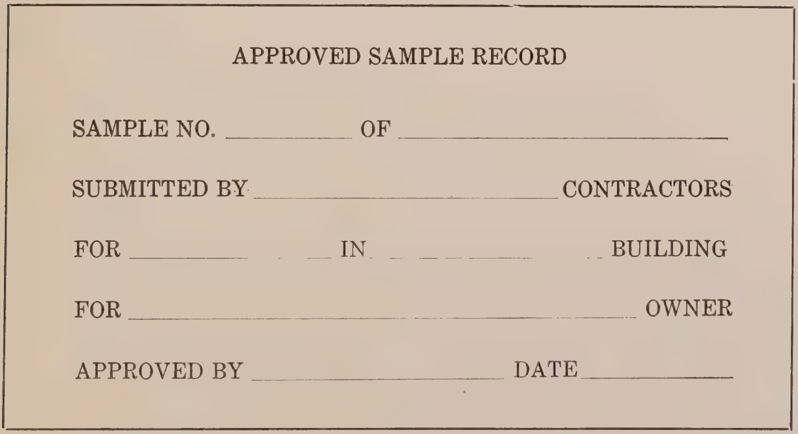
CHICAGO,____________19__

RECEIVED OF PERKINS, FELLOWS & HAMILTON PLAN SET NO.________, SPECIFICATION SET NO. ______OF____________BUILDING FOR THE PURPOSE OF ESTIMATING THE____________ ________WORK.

SAME ARE TO BE RETURNED TO YOU ON OR BEFORE ____________19__

SIGNED________________CONTRACTOR

BY________________



APPROVED SAMPLE RECORD

SAMPLE NO. ________ OF ________________

SUBMITTED BY ________________ CONTRACTORS

FOR ________ IN ____________ BUILDING

FOR ________________________ OWNER

APPROVED BY ________________ DATE ________

Forms Used in the Office of Perkins, Fellows & Hamilton, Chicago, Ill.

completion of the drawings for contract issues, the preparation of scale and full size details is commenced under a predetermined schedule. This schedule is drawn up to allow the greatest amount of time necessary for the production of the more intricate full size and scale drawings, yet allowing for release of these drawings to the interested contactors in time to commence their work so that delivery dates stipulated in the contract will be met.

Where ornament is to be modeled the design department looks after the production of models and makes sure that they are ready for shipment to contractors' shops in sufficient time to release the work to the job.

The superintendent is placed on the work immediately after the award of contracts. He receives a copy of the contract documents and as full size and scale details are released to the contractors a copy is sent to him.

The control of shop drawings is had through rules of procedure that have been formulated to insure the delivery of these drawings at proper times. At the inception of the work a schedule of dawings that are to be furnished to the contractor in addition to the contract drawings is given him and he is asked to state what shop dawings he will prepare, or he is asked to make definite request for shop drawings to be prepared by our office. We indicate dates when the contractor may expect drawings from the office and we ask that he set dates for the submission of his drawings. The following up of release of our details and of the delivery of contractors' shop drawings is handled by one person who is in charge also of the file of drawings and other matters relating to records having to do with the drawings. In this way a continuous flow of work is maintained from and between all sources and the interchange of requirements is effected without a great deal of difficulty.

It is the concensus in the office that the smooth operation and the almost total absence of errors is due entirely to the well-nigh perfect scheme of organization and the almost absolute lack of friction between departments. When a mistake does occur it seems more prominent because there are so few in the course of a year.

Perhaps one reason why the work of the organization is accomplished so successfully lies in the fact that it occupies its own building, built for its particular purpose and with the idea in mind that the departmentalization would be more effectively carried out if placed and given facilities that are only possible in a building built for its specific use. The most important physical aspect of the office is the great amount of light and ventilation and the general feeling of having sufficient room to perform all of the functions necessary. There are no conditions in the office that produce onerous working conditions.

By Gardner C. Coughlin, Supervising Architect with Weary & Alford Company, Chicago, Ill.

THE organization of the Weary and Alford Company is divided into departments handling specialized phases of the work. The procurement of new business is taken care of by certain members of the firm, and the preparation of preliminary sketches, the design, the construction drawings and the engineering equipment, solicitation of bids, award of contracts, and the supervision of construction all are handled by separate departments each under the charge of an individual who is capable of directing these activities in a harmonious way and in complete co-operation with all other departments.

Upon the completion of the preliminary sketches and their acceptance by the client, they are turned over to the design department for some elaboration, more particularly in the fixing of column centers as controlled by the exterior or the interior design. The plans are restudied to make sure they are correct for the needs of the client and then are turned over to the drafting room for production.

The drafting room is operated under the squad system under the general charge of a supervisor and each squad boss is responsible to the organization for the production of a particular set of drawings.

Simultaneously with the beginning of construction drawings, the structural, mechanical and electrical engineers commence their preliminary layout work and from then on each department contributes its quota to the ultimate goal.

We have found that this departmentalization scheme is the only scheme under which the production of drawings and the smooth working of the organization can be accomplished effectively. The heads of the various departments work in complete co-operation and when a sense of inharmony enters into any of the work a meeting of the various department heads is held and each one is expected to speak his mind without reservation, and whatever difficulties have arisen are very quickly adjusted.

ACKNOWLEDGMENT

WE WISH to thank all who have contributed to this symposium in the interest of better Office and Drafting Room Practice and to invite a further discussion of the subject in the pages of this journal. We wish to say that the contributions have been presented here in approximately the order in which we received them and without thought of precedence in any other way.

If you have not contributed to this symposium, please let us hear from you.—EDITOR.

PENCIL POINTS

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In changing address, please send old as well as new address.

THE AMERICAN ACADEMY IN ROME

FROM a letter recently received by C. Grant La Farge, Secretary of the American Academy in Rome, from Gorham P. Stevens, Director, we quote the following items of news:

"Professors Manship and Faulkner have arrived and are at work upon the Ward-Thrasher Memorial. Professor Manship hopes to have his portion ready for the stone cutter before long, and, while the sculpture is being blocked out, he plans to go to Egypt, and, upon his return from that country, he intends to put the finishing touches on the monument himself.

"Sculptor Amateis has a life sized figure of a female bather on exhibition at the international exhibition now open in Rome.

"Visiting Architect Clay, in collaboration with Dr. Esther Van Deman, a Visitor at the School of Classical Studies, is making an interesting restoration of the region between the Regia and the arch of Titus.

"The King and Queen of Spain visited the Spanish Academy when they were in Rome last month, and this notwithstanding the fact that they had but five days for Rome, Bologna and Naples. The King spoke with every one of the Spanish students and saw his work. One of his remarks was to the effect that Spain depended upon the Prix de Rome men to make Spanish art respected. Art is considered so important in France, Italy and Spain, that the highest officials in these countries do what they can to encourage their talented young men. Would it not be well for America to follow suit?

"Mr. John Gray of Rome has made a contribution of five hundred lire to the library.

"There is a movement on foot among the property owners on the Via Giacomo Medici—the street between the Main Building and the city of Rome—to close that street where it crosses the tram line which runs in front of the Main Building. If this can be done, it will be an important step toward peace and quiet around the Main Building.

"Two of the properties between the Main Building and the city of Rome are again for sale. Oh for sufficient money to buy them!

"We have had one distinguished visitor in the President of the University of California.

"The Thanksgiving Dinner was an unqualified success. This is the first time the men have arranged every detail themselves: it was the jolliest dinner we have had in the twelve years I have been connected with the Academy. Sixty-eight at table."

From a letter written to Mr. La Farge by Frank P. Fairbanks, Professor in Charge, School of Fine Arts, we quote the following:

"This month we have started the annual shipment of the men's work to New York. There were thirty-three subjects comprising nine pieces of sculpture by Gaetano Cecere, nine drawings and renderings by J. K. Smith, six drawings of villas and gardens and a scale model by Ralph E. Griswold, and eight paintings and frescoes by Carlo Ciampaglia. The shipment is expected to arrive in New York in ample time for the annual exhibition of the Architectural League.

"There has been a conference of the Fine Arts faculty and senior fellows to discuss the details of procedure for the collaboration competition for the year.

"The Architects Hafner, Deam and Newton are in residence, while Marceau has gone to Florence to obtain material for his studies of the Pozzi Chapel on the Palazzo Palmieri. Hafner is painting his copy of the model of Michelangelo's dome of St. Peter's, while Deam and Newton are both engaged on their first year envois. Newton has obtained all his measurements and other data for his record of the Villa Chigi, while Deam has laid out several drawings for his restoration of the Temple of Fortuna.

"Of the Sculptors, Amateis is working on a new figure and a portrait, having finished his Renaissance relief in marble. Stevens is travelling in France and England after having cast his figure of America and making studies of animal life in the zoo behind the Villa Borghese. Meyer has his first year figure cast in the plaster ready to develop in that material. He has other interesting projects under way.

"Of the painters, Schwarz is working on his principal figure composition, is making water colors and etchings. Floegel has been preparing a new group of cartoons for fresco, and is now travelling in northern Italy. Bradford is away making a tour north to Florence and Venice visiting the Umbrian and Tuscan hill towns.

"Isadore Richmond, on a Rotch Scholarship in Architecture from Boston has just arrived in Rome and is starting to lay out the first of his numerous envois."

FREE EMPLOYMENT SERVICE FOR READERS OF PENCIL POINTS

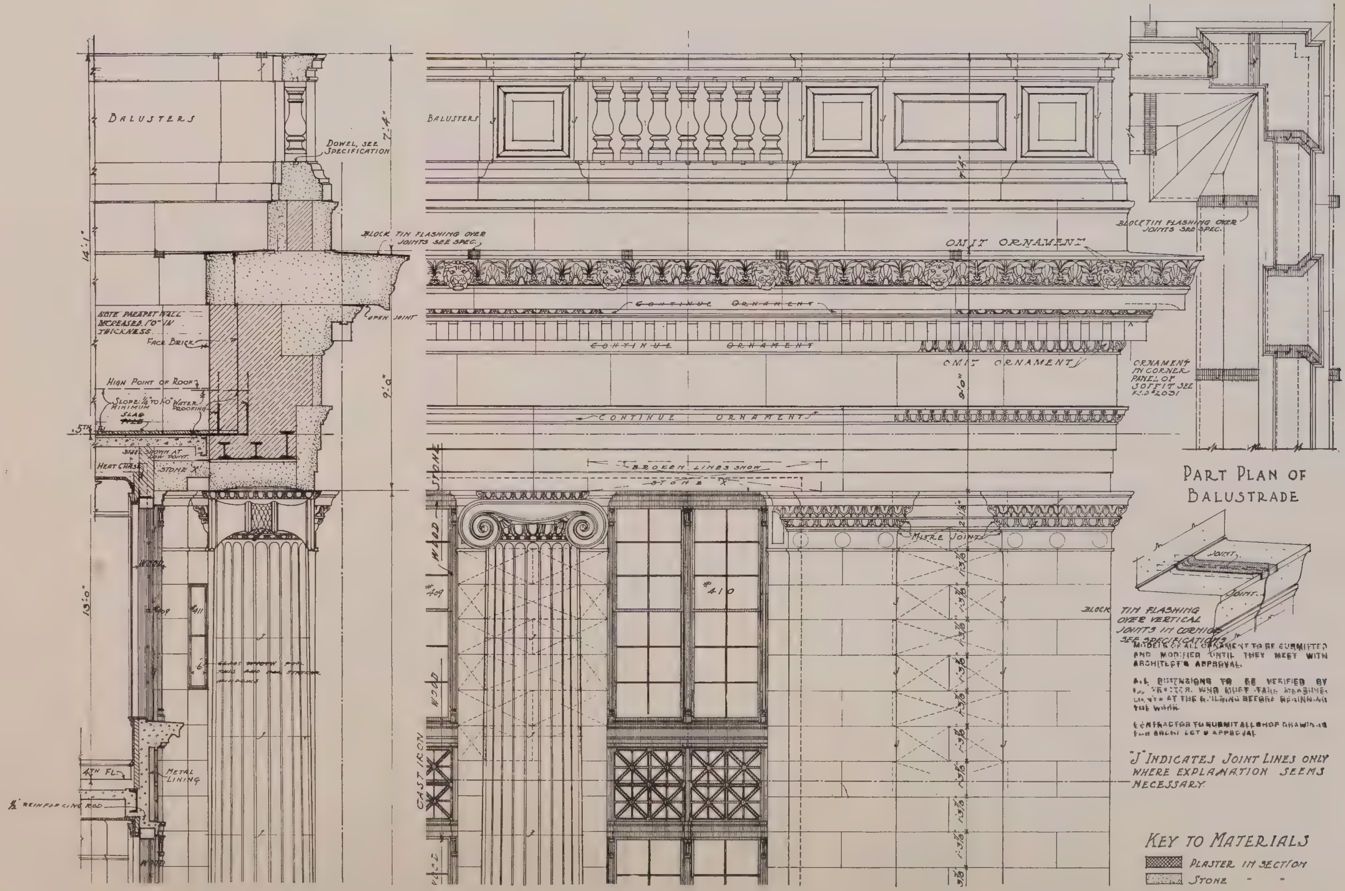
(Other Items on Page 76)

Wanted: High class draftsmen experienced in fine residence work and design. Permanent positions for capable men. Roy Teldon Price, M.A.I.A., Beverly Hill, Los Angeles, Cal.

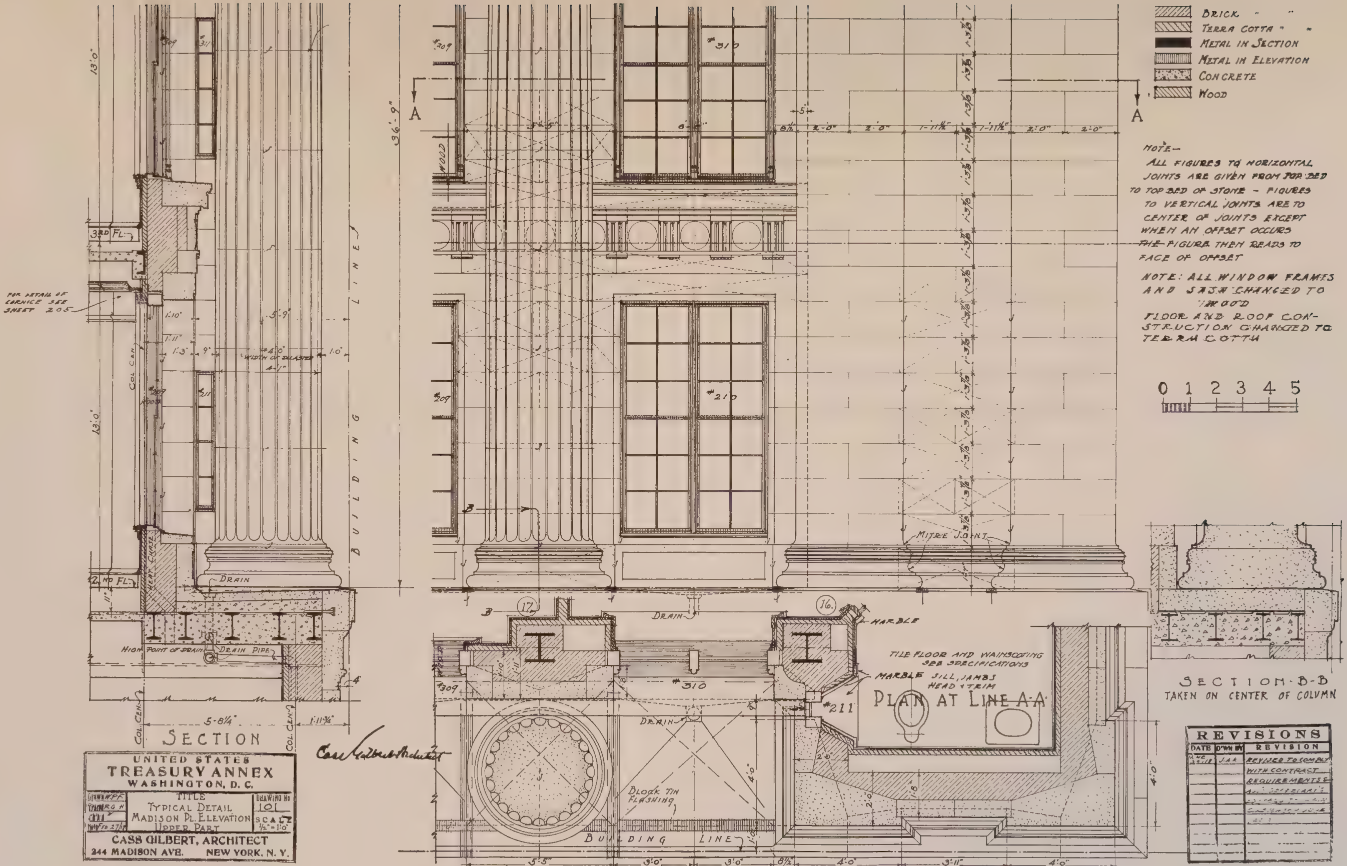
Architectural Draftsman Wanted: One who is neat, accurate and thoroughly capable of making working drawings from sketches. Mostly banks and commercial buildings. In reply kindly give full information as to training, experience and class of work, also state age, married or single and salary. Tilghman Moyer Co., 824 Hamilton St., Allentown, Pa.

Wanted: One or two draftsmen, senior or good junior; men who are neat tracers and can make good lettering and who are capable of laying out work under supervision. Can offer good working conditions, and will pay salary according to ability. Residence, school, church and commercial work. C. Gilbert Humphreys, Architect, Winston-Salem, N. C.

Young Lady wishes position as Secretary to architect. Thoroughly familiar with all duties of an architect's office. Can assume generally the responsibility of an architectural commission. Best references furnished. Box R. P. Care of PENCIL POINTS.—


BALUSTERS
DOWEL, SEE SPECIFICATION
7'4"
14'1"
BLOCK TIN FLASHING OVER JOINTS SEE SPEC.
OPEN JOINT
9'0"
NOTE PARAPET WALL DECREASED 1'0" IN THICKNESS.
FACE BRICK
HIGH POINT OF ROOF
SLOPE 1/4" TO 1'0" MINIMUM
WATER PROOFING
SLAG
5TH FL.
HEAT CHASE
STONE X
13'0"
WOOD
#409
#411
4TH FL.
METAL LINING
½" REINFORCING ROD
BALUSTERS
OMIT ORNAMENT
CONTINUE ORNAMENT
OMIT ORNAMENT
ORNAMENT IN CORNER PANEL OF SOFFIT SEE F.S.D. #2031
BROKEN LINES SHOW STONE X
STONE
WOOD
CAST IRON
#410
MITRE JOINTS
PART PLAN OF BALUSTRADE
JOINT
BLOCK TIN FLASHING OVER VERTICAL JOINTS IN CORNICE SEE SPECIFICATIONS
MODELS OF ALL ORNAMENT TO BE SUBMITTED AND MODIFIED UNTIL THEY MEET WITH ARCHITECT'S APPROVAL.
ALL DIMENSIONS TO BE VERIFIED BY THE CONTRACTOR WHO MUST TAKE MEASUREMENTS AT THE BUILDING BEFORE BEGINNING THE WORK.
CONTRACTOR TO SUBMIT ALL SHOP DRAWINGS FOR ARCHITECT'S APPROVAL.
"J" INDICATES JOINT LINES ONLY WHERE EXPLANATION SEEMS NECESSARY.
KEY TO MATERIALS
PLASTER IN SECTION
STONE

Details of Construction—United States Treasury Annex, Washington, D. C., Cass Gilbert, Architect.


BRICK
TERRA COTTA
METAL IN SECTION
METAL IN ELEVATION
CONCRETE
WOOD
NOTE—
ALL FIGURES TO HORIZONTAL JOINTS ARE GIVEN FROM TOP BED TO TOP BED OF STONE – FIGURES TO VERTICAL JOINTS ARE TO CENTER OF JOINTS EXCEPT WHEN AN OFFSET OCCURS THE FIGURE THEN READS TO FACE OF OFFSET
NOTE: ALL WINDOW FRAMES AND SASH CHANGED TO WOOD
FLOOR AND ROOF CONSTRUCTION CHANGED TO TERRA COTTA
0 1 2 3 4 5
SECTION-B-B
TAKEN ON CENTER OF COLUMN
REVISIONS
DATE
D'WN BY
REVISION
REVISED TO COMPLY WITH CONTRACT REQUIREMENTS
PLAN AT LINE A-A
TILE FLOOR AND WAINSCOTING SEE SPECIFICATIONS
MARBLE SILL, JAMBS HEAD + TRIM
MARBLE
MITRE JOINT
DRAIN
BLOCK TIN FLASHING
BUILDING LINE
SECTION
DRAIN PIPE
HIGH POINT OF DRAIN
FOR DETAIL OF CORNICE SEE SHEET 205
3RD FL.
2ND FL.
COL. CEN.
WIDTH OF PILASTER
36'-9"
13'-0"
5'-8¼"
#310
#210
#211
#309
A
B
UNITED STATES
TREASURY ANNEX
WASHINGTON, D. C.
TITLE
TYPICAL DETAIL
MADISON PL. ELEVATION
UPPER PART
DRAWING No 101
SCALE ½" = 1'-0"
CASS GILBERT, ARCHITECT
244 MADISON AVE. NEW YORK, N. Y.
Cass Gilbert Architect

Details of Construction—United States Treasury Annex, Washington, D. C., Cass Gilbert, Architect.

(See upper part of drawing on opposite page.)

THUMB TACK CLUB OF DETROIT

On the evening of November 13, the Thumb Tack Club of Detroit held a very enthusiastic smoker and get together in which thirty-five draftsmen participated. The meeting took place in the assembly room of the Arts and Crafts Studio, where refreshments were served and an entertainment was provided.

The Third Annual Architectural Exhibition was discussed and the various committees gave reports of the progress which had been made. This exhibition is given annually under the auspices of the Thumb Tack Club and compares very favorably with that given in other larger cities. Exhibits have been received from most of the other larger eastern offices—as well as from Cleveland, Chicago, Columbus and other mid-western and western cities; and combined with the local material, this year's showing promises to surpass the efforts of former years. The annual exhibition has become an established event and is looked forward to with great interest by all those interested in architecture. This years' exhibition will be held in the galleries of the Detroit Institute of Arts from December 10th to 23rd inclusive. In connection with the Exhibition, a Year Book will be published as usual and may be obtained after December 10th by writing to R. W. Tempest, 324 McKerchey Bldg., Detroit, Mich. The book will be 8½ x 11 inches in size with stiff board covers, will contain 80 plates printed on dull coated paper and will sell for $1.50.

Work of such well known architects as Day & Klauder, Wilson Eyre & McIlvaine, Holabird & Roche, Richard E. Schmidt, Garden & Martin, Benjamin Wistar Morris, Alfred Bossom, Miller & Reeves, Mellor, Meigs & Howe, as well as work of local architects, comprises the illustrations.

At this meeting definite steps were taken to re-establish the Atelier and eighteen candidates signified their intention of enrolling in the Beaux Arts classes. Many men who were unable to be present are known to be interested in Beaux Arts work and it is expected that at least twenty-five men will be taking Beaux Arts problems this winter.

The Thumb Tack Club was organized some four years ago and was an outgrowth of the Detroit Architectural Atelier, which was broken up by the War. The Club as originally organized included engineers, architects and men interested in the allied arts and started out with much enthusiasm. We maintained expensive club rooms for about a year and a half until the Club was so far in debt and interest in it had dwindled, until there were but few interested. The Board of Directors decided to put on an Architectural Exhibition. This exhibition proved to be very much a success both financially and as an educational feature. The exhibition we are holding this year will be the third and will be held at the Detroit Institute of Arts on December 10th to 22nd, 1923.

Mr. John B. Jewell is president of the Club and is a member of the firm of Halpin & Jewell, 1024 Hammond Building. Mr. R. W. Tempest of the office of George D. Mason & Co., Inc., is chairman of the Exhibition Committee for this year.

The Club as now operated, is strictly an architectural club with associated members of men interested in the allied arts. The membership is small and confined to those who are really interested in the Club. An Atelier has been formed to do Beaux Arts work and in all probability you will hear from us later. We have not, as yet, I believe, selected a Patron.

The Henry Gillette Woodman Scholarship for 1923 has been awarded to Mr. Gerald Kenneth Geerlings, who received the Bachelor's degree in 1921 and the Master's degree in 1922 from the Department of Architecture of the University of Pennsylvania.

Henry Gillette Woodman Scholarship was founded by the bequest under the will of George B. Woodman deceased, in memory of his son, to provide for the payment of expenses or toward the expense of one year's travel in Europe of a student or graduate of the Architectural Department of the University of Pennsylvania. This Scholarship is open to any holder of a degree who completes at the University of Pennsylvania the requirements of either of its degrees in Architecture (B. Arch. or M. Arch.).

ALPHA RHO CHI

The Ninth Annual Convention of Alpha Rho Chi will be held at the Curtis Hotel, Minneapolis, Minn., January 2-3, 1924. It promises to be one of the best attended and most interesting conventions of several years.

The Mnesicles committee has arranged a formal dinner-dance for Wednesday evening, January 2, at the Curtis Hotel, where the visiting delegates will make their headquarters. This will make a welcome relaxation between the two days of strenuous business. The traditional stag banquet will take place the evening of January 3.

THE CHICAGO ATELIER

The invitation reproduced on this page brought out a gang of about eighty to initiate the new quarters of the Chicago Atelier.

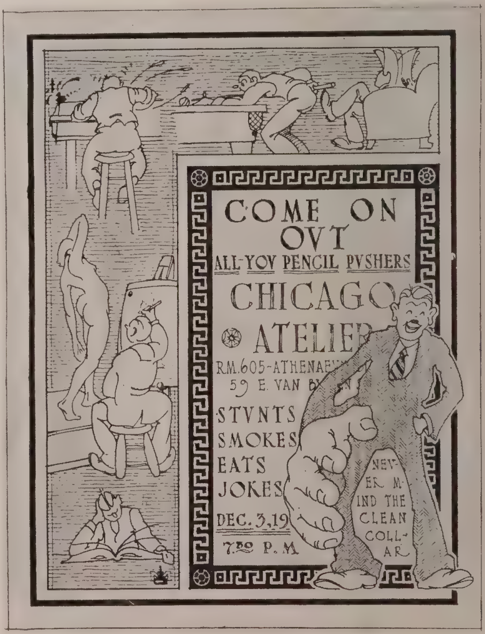
Talks by Mr. Andre Rebori, Mr. Edmund S. Campbell, stunts by members, a five minute competitive sketch by all present, the "crit" of sketches by Mr. Rebori, together with food, drink and fellowship made the occasion enjoyable and well worth while.

The Chicago Atelier was organized last month for the main purpose of developing architectural design. This will be accomplished by the participation in competition work.

The organization is fortunate in having Mr. Campbell, as its patron. Also many prominent architects and men of affairs as associate members.

Membership is open to all. From the young man who has had neither practical or technical training, to the architect or draftsman who has had all the advantages. The essential qualifications are the desire for improvement, and lots of genuine good fellowship.

Anyone interested in the purpose of the Chicago Atelier is cordially invited to come to 605 Athenaeum Building.



Above is shown the cleverly drawn design for a recent get-to-gether of the Chicago Atelier.

Alfred C. Bossom

ALFRED C. BOSSOM ELECTED A FELLOW OF THE ROYAL INSTITUTE OF BRITISH ARCHITECTS.

ALFRED C. BOSSOM, of New York City, has been elected a Fellow of the Royal Institute of British Architects, an honor which has been conferred upon only ten architects in the past fifteen years. Under the constitution of the R. I. B. A., such an election must be unanimous on the part of the Council.

The list of men upon whom this honor has been conferred includes the following: Giles Gilbert Scott, R. A., the architect of Liverpool Cathedral; the late Frank Darling of Toronto, Royal Gold Medallist; Raymond Unwin, the famous Town Planner; Ralph Knott, the architect of the London County Council Hall, and General Sir Charles Rosenthall, K. C. M. G., the distinguished Australian soldier who is now President of the New South Wales Institute of Architects.

Mr. Bossom is known as an architect of large buildings, and has given particular attention to the needs of banking institutions. During his various European travels he has made a special study of banks, including many of the world's most famous institutions, and his training both in finance and engineering as well as in architecture equipped Mr. Bossom especially well for the designing of the many large commercial buildings and bank buildings of which he is the architect.

Mr. Bossom is an Englishman by birth and was a student of several important British schools of architecture where he won many medals for his work.

Mr. Bossom's keen interest in professional education has been shown by his establishment recently of the Travelling Scholarship in England which bears his name. From the fund he created for this purpose medals are awarded to students of the leading British architectural schools who submit the best designs for commercial buildings. A certain number of these prize medallists are to come to the United States each year to study American commercial architecture for six months, their expenses being paid from this fund. The competitions for these studentships are held under the supervision of the Royal Institute of British Architects. The students, upon their arrival in the United States, will be under the supervision of the Architectural League of New York, of which Mr. Bossom is an officer, as well as Chairman of the English division of its Committee on Foreign Relations.

This recognition which has come to Mr. Bossom is one more indication of the constantly increasing friendship between the architects of Great Britain and of America and of the growth of understanding and community of interest among the English-speaking peoples as well as a recognition of the importance of Mr. Bossom's work.

CINCINNATI ARCHITECTURAL SOCIETY

SHORTLY after the World War the Cincinnati Architectural Society, which had been disbanded for the duration of the war period, was reorganized by a small number of enthusiastic men who were determined to build up in Cincinnati an Architectural Society that would be of real credit to the profession and we believe that they have fully succeeded in every way. Our membership up to the present time has reached 135 in number and among them are many of the leading architects of the city and also a number of the professors of the local University, and if we may rely upon the program that the Membership Committee has mapped out for themselves we will have at least a total of 160 members by the close of this season.

Permanent quarters have been secured by the Society through a lease covering a period of years with the Cincinnati Art Club in their newly acquired four story building at 327 East Third St., both clubs using various rooms throughout the entire building on different nights in order that their activities may not interfere with each other. On the first Monday night of each month the regular meeting is held and is always preceded by a splendid dinner which is served in the banquet hall and followed by a talk by the speaker of the evening on some architectural subject of interest. These meetings are well attended by the members and we have no trouble in getting a large turnout irrespective of whatever else may be going on on that particular night.

At our December meeting a most interesting talk was given by Professor Cecil Baker, professor of architecture at the University of Cincinnati, on the advantages of the co-operative course in architecture as now being used in this college. While this is an entirely new idea in an architectural course, we cannot help but feel that sooner or later many of our leading colleges will be adopting this idea for the many advantages it offers.

Our Educational Committee is on the job and working hard, and classes have been resumed for this year's work in Clay Modeling, Design and Life Class. Problems in Design include Archaeology, Plan and Analytique given by the Beaux Arts Institute and quite a number of drawings were sent in to New York on the first problem, a much larger number of the men, however, have taken the Esquisse for the second problem and it appears that they are going to make a very good showing. The History and Engineering classes have been held up temporarily because of the remodeling of the rooms to be used for this purpose, but these subjects will undoubtedly start immediately after the Holidays.

For the year 1924 the following officers have been elected: H. Henthorn, President; Wylie Bloodgood, Treasurer; Conrad J. Rohr, Secretary.

THE annual meeting of the American Society of Heating and Ventilating Engineers will be held at the Hotel Pennsylvania, New York, January 22nd to 25th. Full particulars may be obtained from Mr. C. W. Orbett, Secretary of the American Society of Heating and Ventilating Engineers, 29 West 39th Street, New York.

HERE *and* THERE *and* THIS *and* THAT

Conducted by RWR

WELL, here we go! We have never conducted a department before nor done much of anything else for that matter, but knowing as we do that we are addressing one of the most intelligent audiences in America, if not in the world, we are entering upon our task with every assurance that brilliant stuff for this section of PENCIL POINTS will come to us in such volume that soon all we will have to do will be to swing a big letter opener and arrange the material so it will look nice on the page.

So that there may be no misunderstanding regarding the scope of this department let us restate the proposition in our own words:—Contributions may range all the way from funny to very serious, stopping at all the way stations. They may be about architecture or about anything; they may be in prose or verse, in pencil, ink or wash; they may be of any length from a half a line to a page (if good). Sketches are welcome, caricatures—anything clever or interesting. This gives every reader of PENCIL POINTS a chance to flap his wings and bust into song or whatever he likes to bust into.

HERE'S where we pass the buck to our faithful contributors. Anonymous sends us a poem and we print it as is:

THE FIFTY-SEVEN LAMPS OF ARCHITECTURE

When I decided to build me a house
I felt just a little afraid
That plan and design were not quite in my line
So I sought Architectural aid
And I said: Show me, pray, something most recherche
For I'm weary of hanging my hat
In an early Victorian
Pre-Montessorian,
Plain two-by-fourean flat.

The Architect puffed at his period pipe
As he sat in his Renaissance chair,
And he gave me a smile in the pure Gothic style,
Though he spoke with a Romanesque air,
Said he: If your taste is not wholly debased,
The best you are certain to find,
Is the later Colonial,
Pseudo Baronial
G. Washingtonial kind.

I thanked him politely and paid him his fee,
But sundry acquaintances cried,
"That stuff you should shun for it hasn't been done
Since Benjamin Harrison died."
And they took me direct to a new Architect
Who argued with logic compelling
For a Quasi Delsartean,
Post Bona Partean,
Wholly Beaux-Artean dwelling.

My downfall had started; I groped in a maze,
Of traces, transitions and trends,
And I labored anew over prints that were blue,
With the aid of my numerous friends.
But I don't knit my brow about building plans now,
For all my money is spent,
And my home's an Arcadian
Second-Crusadean
Pink-Lemonadean **Tent.**

Get busy, poets!

WALTER B. BROWN of Dayton, Ohio, sends the following letter and we do not know how to answer it. What is the **best** way of filing and taking care of this valuable reference material? Won't some of you who have devised satisfactory systems help Mr. Brown and at the same time other readers of PENCIL POINTS who are similarly perplexed?

> "As a subscriber and admirer of PENCIL POINTS, I am taking the liberty to ask a question which may at the same time suggest a topic for an editorial or discussion in the magazine. Have you any suggestions for a good practical filing system of plates and articles cut from the magazines? Work is a little slack at the office and I am utilizing the time by tearing the magazines apart and saving all worth-while plates and articles. It occurred to me this subject may be important and interesting enough to architects and draftsmen who take the magazines in their homes to be discussed in your magazine. I thank you for any suggestion you may be able to give and would appreciate an early reply. I wish PENCIL POINTS a very successful year in 1924."

AN INTERESTING suggestion is made by A. F. Seiden, 175 5th Avenue, New York, and we print his letter in full:

"Most draftsmen are interested in details. May I suggest that you have in each issue of your PENCIL POINTS one sheet given over to nothing but details. Ordinary and everyday construction details are sorely in need of by most of us. There may be a sequel to the details drawn and described by Mr. Knobloch in his 'Good Practice in Construction.' I have in mind such details as

1—saw tooth skylights (**good** Construction of)
2—built up doors; transoms, etc.
3—window seat and radiator enclosure, etc., etc., etc.

Many things I can't just think of now, but that come up every little while and make you wonder just what makes up for **good** construction. I am a two-year subscriber, thank you!"

Suggestions are in order for other details to be made a part of this series. What would **you** like to see included to round out the work started in Mr. Knobloch's book and carried still further in the October issue of PENCIL POINTS? Tell us what you want and we will try to get it to you.

NOW we come to the question of a sketch competition. We did not conduct one in 1923, but have heard from so many of our readers expressing great interest in such a competition that we have decided to resume in 1924. Definite announcement will be made later, but we would like to get an expression of opinion from you as to the feasibility of adding a new feature to this event. The suggestion has been made not only that prizes be given to the winners of the competition, but also that the sketches submitted be placed on exhibition and **sale** immediately after the drawings are judged. Many people are greatly interested in sketches and would purchase them at a moderate price. Would those submitting sketches in the competition agree to sell them? Would such a feature tend to detract from the main purpose of the competition, which is to stimulate an interest in sketching? Or would it tend to stimulate interest in the entire event and produce a more interesting competition with reasonable financial rewards as a possibility to those entering it? Expressions of opinion are invited.

DOES anyone know the address of Mr. C. Arromall Markhart? If so we would appreciate receiving it at this office.

We would also like to receive the correct addresses of the following:—
A. R. Forester, Salina, Kansas, H. L. McNabb, Los Angeles, Cal., J. Riedel, Santa Barbara, Cal., H. E. Villa, New York City, N. H. Caldwell, Hollidayburg, Pa., E. R. Becker, Weehawken, N. J. and G. W. Barrett, Athens, Ga.

Mr. Charles Morse Stotz, Pittsburgh, Pa., sends a little sketch of some old houses in his home town. We like it and here it is.

Sketch by Charles Morse Stotz.

Come on you sketchers and let us see your stuff! We want to publish each month a sketch from someone whose work has never before appeared on the printed page.

The following letter and answer may be of interest to those desiring to study architecture by means of correspondence courses:—

> "I should like to take a correspondence course in architectural drafting, and would like your advice as to where I can best get this. How does this course offered by the International Correspondence Schools compare with like courses offered by the extension departments of Columbia University? Hoping that you can give me, as a subscriber, this favor, I am
>
> (signed) JOHN S. BLANDING.

> "Replying to your letter of November 27th we wish to say that both the Home Studies Courses given by Columbia University Extension and the International Correspondence Schools courses in architectural drafting are very good. The Department of Architecture at Columbia, of course, ranks very high among the architectural colleges in the country, but we suggest that you write to the International Correspondence Schools headquarters at Scranton, Pa., and also to Columbia for their descriptive literature of the courses which you wish to take. We believe that you will get very good instruction from whichever one of these schools you elect. Trusting that we may hear from you and the progress you are making in your new work, we are,
>
> Yours very truly,
> PENCIL POINTS."

ARCHITECTURAL BOWLING LEAGUE OF NEW YORK

AT THE recent meeting of the Architectural Bowling League of New York, Weggerman of McKenzie, Voorhees & Gmelin's office bowled the highest score of the evening, carrying off the Christmas prize—score 192. Baker of J. Gamble Roger's office scored next highest winning the New Year's prize—score 177.

A feature of the evening of December 18th was the fine playing of the team from Warren & Wetmore's office. We missed Lyman and Smith who were on the sick list that evening. Hope for the speedy recovery of the absentees is expressed.

The surprise of the evening was the winning of their three games by Warren & Wetmore's, J. Gamble Rogers' and Alfred C. Bossom's offices.

Johnke of Dwight Robinson's office holds the high individual score of 212.

Ackerman of McKenzie, Voorhees & Gmelin holds the high individual average of 160⅝.

McKenzie, Voorhees & Gmelin's office holds high team score of 809.

The Club contributed $25 to the New York American Christmas Fund.

It was decided at the last meeting of the League to hold a two-man team tournament as well as the three-man and five-man tournaments.

Captain Paradies of McKenzie, Voorhees & Gmelin's office is counting on winning the championship and his team is now leadng the league.

Standing of the Teams, Dec. 18, 1923

		Played	*Won*	*Lost*
1	McKenzie, Voorhees & Gmelin	16	14	2
2	Warren & Wetmore	14	12	2
3	Alfred C. Bossom	14	10	4
4	Dwight Robinson	14	10	4
5	James Gamble Rogers	14	7	7
6	Cass Gilbert	16	9	7
7	Thos. W. Lamb	16	9	7
8	W. L. Stoddart	14	7	7
9	McKim, Mead & White	16	5	11
10	Sommerfield & Steckler	14	3	11
11	Benjamin W. Morris	16	3	13
12	Donn Barber	16	0	16

The officers of the League are: E. L. Capel, President; H. A. Poll, Vice President; N. T. Valentine, Secretary; P. M. Lynch, Treasurer.

WANTED: Architect or architectural engineer as Chief and Assistant Chief of the newly created Bureau of Buildings of the Milwaukee School Board. Salary from $6,000 to $9,000 for the first position, $4,000 to $6,000 for the assistant. Candidates must be thirty years of age and besides their training must have had at least five years' practical experience in the designing and construction of large buildings. Apply at once and not later than March 1st, to the City Civil Service Commission, City Hall, Milwaukee.

REMEMBER a ten dollar bill will be sent each month for the most meritorious contribution for this department. Send your material early. If you are afraid your stuff is too late for February send it in just the same and if it fails to catch one issue it may turn up in the next one. And don't be bashful.

THE SPECIFICATION DESK

A Department for Specification Writers

MISCELLANEOUS ITEMS OF CONSTRUCTION PART XIV.

By Otto Gaertner

In this series of notes Mr. Otto Gaertner, A.I.A., Associate Member American Society of Civil Engineers, is treating of a number of the minor matters of construction that are troublesome unless the architect happens to have met a similar problem previously—matters of a more or less special nature.—Ed.

Garages (Continued)—The weight of an automobile is not uniformally distributed as is the weight of merchandise placed on a freight elevator since it has only four points of contact with the surface on which it rests and for this reason more than the usual factor of safety must be allowed. The elevator car should be supported by means of a steel sling and it should be enclosed either with solid wood and preferably steel to a height of five and one-half to six feet or with wood or metal openwork. except where it must remain entirely open for loading and unloading. If the enclosure is of openwork, the openings should not be more than one inch wide. Such parts of the grille as come opposite the counterweights should be covered to a height of six feet or more with a wire mesh of not lighter than number sixteen gauge wire having not over one-half inch openings if the clearance between the enclosure and the counterweights is less than two inches.

The counterweights are mentioned, but any other structural part of, or projections in, the shaft are equally dangerous if the grille openings are too large. Also it would be well to protect against danger from this source by placing the mesh or decreasing the grille openings wherever the counterweights and projections come within as much as four or five inches. If the crosshead of the car is less than six feet, the car enclosure should extend to it.

In place of the enclosure being made of the material mentioned above, it may be made entirely of wire mesh. In that case, however, the wire should be at least number eight gauge or flat ribbon of equal strength may be substituted. The openings of the mesh should be small enough to reject a one and one-half inch diameter ball.

The top of the elevator should also be covered with a solid cover or one of the mesh just mentioned, but it should be strong enough to resist a load of one hundred and fifty pounds suddenly applied at any point. The car should also be supplied with gates that will guard the full opening when they are closed, except that they need not exceed the usual height of six feet. There are times when material of unusual length must be taken to upper floors to be used for repairs et cetera. Then it is well to have a section of the elevator top hinged to open so that they may project above the car.

While the car enclosure as described is suitable for a freight elevator and for one for taking automobiles from floor to floor such an elevator may at times serve as a passenger elevator if the building does not warrant a separate one being installed. If the building comes under the jurisdiction of building codes any rules and regulations covering passenger elevators must also be complied with. For instance, an emergency exit must be provided in the top of the car, such opening being at least sixteen inches in its least dimension and containing not less than four hundred square inches. If there is more than one elevator in the shaft a side opening in each car may also be required.

All elevators should have gates on their platforms to close the loading entrance if the utmost safety is required. In any case however the doorways of the shaft shall be provided with door or gates, preferably solid doors of fireproof design. If grilles or wire mesh is used it should have wired glass behind it on the shaft side and if the wired glass is omitted the grilles or mesh should be small enough to reject a ball two inches in diameter. In territories where doors or gates are mandatory, some precaution should be taken against persons stepping through a shaftway opening and into the shaft. A chain or bar stretched across the opening about 12 inches back from the edge of the shaft will do but a low gate sliding either up or sideways would be better.

A gate sliding upward can be moved by hand or it may be arranged to work automatically with the car. This type of gate may be of openwork or solid and should be at least three and one-half feet high. If this gate is semi or fully automatic it should move in guides but such a gate is not recommended for cars travelling over seventy-five feet per minute. A locking device should be provided to prevent the opening of the gate when the car platform is not at or very near the landing or floor of the opening into the hoistway where the gate occurs. All gates and doors should be strong enough to resist a sudden pressure of seventy-five pounds applied at any point without being permanently deformed and without being sprung from their guides.

Sometimes an elevator may be provided with sliding doors or gates, one leaf sliding behind the other so that only one need be moved for passenger service and if it is desirable to use the car for automobiles or freight, first the one is slid behind the other and then both are swung outward together. In such a case an arm fastened to the second door acts as a track and guide for the sliding door, the arm extending beyond the former which is hinged to the jamb of the doorway. In addition the sliding door should be provided at the bottom with a bolt acting as a stop and guide by travelling in a grove in the saddle of the doorway. Also the hinged door should be provided in the bolts top and bottom to hold it rigidly to the head and sill of the doorway except when the bolts are released in order to swing the door open together with the sliding door behind it.

Collapsible gates are not recommended unless made and protected in such a way as to guard against accidents due to shear. Hoisting doors and gates may be semi-automatic or fully automatic as mentioned for one of the types mentioned above. By semi-automatic we mean that the door or gate may be manually opened but directly or indirectly closed by the motion of the car. Fully automatic doors or gates are those which are both opened and closed by the motion of the car, either directly or indirectly. Some gates and doors are independently operated, that is they are opened and closed manually or by power which is not furnished by the motion of the car.

The shaftway doors are sometimes provided with interlock devices primarily to prevent the movement of the car unless all hoisting doors are closed and locked and to prevent the opening of any door unless the elevator car is standing at rest opposite that door. A number of other conditions can be taken care of by this device according to the way it is made and installed. It is generally inoperative however, and should be so, when the emergency release is used.

A. I. A. CONVENTION

THE fifty-seventh annual convention of the American Institute of Architects will be held in Washington, D. C., in May 1924. Though it was announced some time ago that the convention would be held in New York this year it was thought best to change this plan and to hold the fifty-eighth convention in New York in 1925.

A SUBSCRIBER is very anxious to secure a complete file of Pencil Points to January 1923. Anyone wishing to sell such a set should address Subscriber, care Pencil Points.—Adv.

PUBLICATIONS OF INTEREST TO THE SPECIFICATION WRITER.

Any publication mentioned under this heading will be sent free, unless otherwise noted, upon request, to readers of Pencil Points *by the firm issuing the publication. When writing for any of these items please mention* Pencil Points.

Architectural Specifications.—Complete specifications on exterior and interior finish coating, structural coatings, cement coatings, shingle stains, floor and wall finishes, enamels, varnishes, etc. 32 pp. 8½ x 11. The Glidden Co., Cleveland, Ohio.

Dust Problems and Their Solution.—Presents basic idea of dust engineering covering subject of air filtration, standard specifications and other useful data, diagrams, etc. 48 pp. 8½ x 11. Midwest Air Filters, Inc., 100 East 45th St., New York.

Published by the same firm, Architects' and Engineers' Data Book covering a line of special steel sections suitable for a variety of industrial uses. 50 pp. 8½ x 11.

Brass Pipe for Water Service.—Bulletin B-1 monograph on the subject, typical layouts and valuable engineering data for architects, engineers and contractors. 8½ x 11. 32 pp. The American Brass Co., Waterbury, Conn.

Catalog of Blueprint Machinery and Accessories.—M-23 containing complete listings of modern types of blueprinting machinery as well as blueprint room requisites. 6 x 9. 64 pp. C. F. Pease Co., 803 No. Franklin St., Chicago, Ill.

Published by the same firm. Catalog of drawing instruments covering complete line. Apply for Catalog C-03.

The Gospel of Fresh Air.—7th edition. Treatise on the subject of modern ventilation covering various types of buildings. Profusely illustrated and containing much useful data. The Swartwout Co., Cleveland, Ohio.

Published by the same firm Swartwout Model Buildings. Illustrated booklet describing type of portable building suitable for garages, filling stations and many other temporary and permanent uses. 32 pp. 8 x 11.

Theatrical Lighting Equipment and Effects.—Catalog and handbook covering line of specialties, technical data on the subject, tables and specification data. 76 pp. 6 x 9. Display Stage Lighting Co., Inc., 344 West 44th St., New York City.

Nonpareil Corkboard Insulation.—Handbook on the subject covering cold storage, warehouses and a large variety of buildings where insulation is important. Drawings, diagrams and much engineering data. 150 pp. 6 x 9. Armstrong Cork and Insulation Co., Pittsburgh, Pa.

Published by the same firm, Nonpareil Insulating Brick, technical bulletin covering subject of insulating brick for a variety of uses. 72 pp. 6 x 9.

Atlantic Terra Cotta.—Monthly publication for architects and draftsmen. Recently issued numbers deal with Terra Cotta Frieze, 15th Century, profusely illustrated with photographs and the Renaissance Architecture of Terra Cotta featuring several beautiful examples of old Italian work. Atlantic Terra Cotta Co., 350 Madison Ave., New York.

Kenney Curtainless Showers.—Loose-leaf specification portfolio showing various models completely. Photographs, roughing-in measurements, sections and specifications. 8½ x 11. The Kenney-Cutting Products Corp., 507 5th Ave., New York.

G. & G. Telescopic Hoists.—Complete specification data covering all models, layouts, drawings, accessories covering subject of equipment for ash removal. 8½ x 11. 24 pp. Gillis & Geoghegan, 537 W. Broadway, New York.

Artist and Drawing Material Catalog.—Complete catalog of everything required in the drafting room, fully described, illustrated and priced. 350 pp. F. Weber Co., Dept. P. P., 1220 Buttonwood St., Philadelphia, Pa.

Saving Home Construction Costs.—Technical booklet on this important subject. Long-Bell Lumber Co., R. A. Long Bldg., Kansas City, Mo.

Refrigerating Manual.—Handbook on refrigerators containing specification data for hotels, clubs, institutions and residences. Jewett Refrigerator Co., 147 Chandler St., Buffalo, N. Y.

Published by the same firm, Refrigeration and Health, also Jewett Solid Porcelain Refrigerator, booklet giving dimensions and complete data.

Weatherstrip Details.—Blueprint booklet showing complete line of window and door details covering openings of all types; sections and much practical information. 8½ x 11. The Diamond Metal Weatherstrip Co., Columbus, Ohio.

Spring Activities—No. 30 of Alpha Aids Series.—Details of Colonial bungalow, floor plans, sections, etc. 20 pp. Alpha Portland Cement Co., Easton, Pa.

Speakman Showers and Fixtures.—Catalog H. Handbook with many sections, layouts and details of a wide variety of special fixtures. 200 pp. 4½ x 7½. The Speakman Co., Wilmington, Del.

Temperature Regulation.—Technical bulletin on subject of temperature regulation under all conditions. Complete technical data, charts, etc. 16 pp. 8½ x 11. The Fulton Co., Knoxville, Tenn.

Positive Electro and Mechanical Interlock and Roller Bearing Hanger.—Technical bulletin illustrating and describing this device suitable for both sliding and swinging doors. 16 pp. 8½ x 11. Elevator Supplies Co., Inc., 1515 Willow Ave., Hoboken, N. J.

Published by the same firm, Crowell Pneumatic Door Operator, technical bulletin of value to all interested in elevator door equipment. 16 pp. 8½ x 11.

Marbleloid Universal Flooring.—Illustrated brochure showing many typical installations with data sheets covering hospitals and schools. 32 pp. 7 x 10. The Marbleloid Co., 447 8th Ave., New York.

Basic Specification for Tile Work.—A most valuable document for all architects, draftsmen and specification writers covering the entire question of setting and laying tile of all kinds. Complete and detailed specifications for all types of work under all conditions; ample space for memoranda. 40 pp. 8 x 11. Associated Tile Mfrs., Beaver Falls, Pa.

Instruction Sheet.—Details of standing seam horse head zinc roofing. New Jersey Zinc Co., 160 Front St., New York City.

Mortar Colors.—Data sheet with 12 panels in color showing mortar joints in combination with brick of various colors and textures. Also much useful information on the coloring of stucco. 8½ x 11. Clinton Metallic Paint Co., Clinton, N. Y.

Andersen Window Frames.—Illustrated booklet with drawings covering design and construction of window frames. 24 pp. 8 x 11. Andersen Lumber Co., Bayport, Minn.

Quality Centrifugal Pumps.—Specification folder, loose-leaf, containing complete data on all types of pumps for building use, diagrams, layouts, etc. 9 x 12. Chicago Pump Co., 2320 Wolfram St., Chicago, Ill.

Doors for the Home and for the Public Library.—Two special bulletins covering modern metal equipment for these two classes of buildings. Entrances, elevator enclosures, stairs, halls and fire exits, corridor and communicating doors and doors for special uses are considered. Specifications and diagrams showing construction and suggestions for ordering. 8½ x 11. 16 pp. Dahlstrom Metallic Door Co., Jamestown, N. Y.

Craftsmanship in Wrought Iron.—Handsomely illustrated brochure with full page plans in sepia showing examples of wrought iron craftsmanship. 24 pp. 8 x 11. Ferro Studio, Inc., 228 East 150th St., New York City.

Column Handbook.—Valuable data on steel and concrete construction, diagrams, tables of strength, specifications, detail construction drawings, tables of safe loads, etc. Handy pocket size, 80 pp. Leatherette binding. Lally Column Co., 334 Calyer St., Brooklyn, N. Y.

Southern Pine Manual of Standard Wood Construction.—Useful book containing hundreds of tables and other useful data covering all types of wood construction. Handsome binding. 186 pp. 4½ x 7. Price $1.50 per copy. Southern Pine Assn., New Orleans, La.

Data Sheet on Refrigeration.—Folder with drawings and samples showing application of waterproof cushion gasket to refrigerator doors in place of weatherstrips, on buildings and for a variety of other uses. 8½ x 11. E. J. Wirfs, 134 South 17th St., St. Louis, Mo.

ADDRESSES WANTED

WE SHALL appreciate it if the following will please send their complete addresses to Pencil Points. It will be noted that the name of the city and state are lacking in all these instances.

Thos. A. Johnsen, 1300 Corporation Bldg.; Robert Moody Smothermon, 111 17th Ave., S.; Theodore Yeumeister 2021 West 12th St.; P. T. Poage, State Dept. of Public Works; Thomas F. Murray, Dept. of Architecture; Dewey L. Irish, 1765 Childs Ave.; Chas. E. Armstrong, 401 Reynolds Bldg.; C. R. Duncan, 308 W. K. H. Bldg.; Willard F. Davison, Elwyn; William Henry Harrison, 4301 E. Washington St.; D. Look, 2015 St. Charles Ave.; Louis S. Haffner, 710 S. Altamont St.; Geo. Hach, 420 Lewis St.; Maxwell Siegel, 248 Glenmore Ave.; Geo. Pribish, Jr., 1921 Berwyn Ave.; Newell S. Tobey, 1500 Farwell Ave.; Robert Sutton, 414½ 8th St.; Wm. F. Stevens, 300 Virginia Terrace; Paul H. White, 1325 Fourth St.; E. Spencer Benton, Jr., 527-29 Stahlman Bldg.; M. R. Blair, 400 Federal Square Bldg.; Clarence A. Damuth, 154 East Ave.; Raymond F. Fletcher, 2618 South Chadwick St.; William T. Gunty, 175 Rowe St.; Emery Green, 2018 West 12th St.; Willis A. Conklin, 401 So. Ocean Ave.; Horace B. Hammond, 738 Broad St.; John J. Hayes, 947 Blue St.; Joseph Hoefner, 516 Calvin St.; A. K. Hawkins, 458 78th St.; Rudolph M. Krausse, 2311 Travis St.; Donald McLaughlin, 1223 Elder Ave.; Walter Nevara, 2437 So. California Blvd.; D. W. Atkinson, 2014 Tenth Ave.; Sprague W. Ashley, 26 Vick Park A.; Baruch Cohen, 229 East 21st St.; J. Bronger, 359 Riverside Ave.; A. Virgil Tollestrup, 1518 West 64th St.; Carl A. Mulvey, 416 East Locust St.; Leo. M. O'Leary, 2254 Upton Ave.; A. P. Rhoda, 2604 Hibernia St.; Fred J. Jones, 1011 Garden Ave.; Robert H. Ainsworth, 254 No. Menter St.; F. Henry Johnson.

WORK OF THE FONTAINEBLEAU SCHOOL OF FINE ARTS

THE first session of the Fontainebleau School of Fine Arts held during the past summer in the Palace of Fontainebleau marked the successful beginning of an educational effort that is of great significance, for it has as its basis the idea of training American students in the most favorable environment, actually in one of the greatest and most interesting monuments of French architecture and in daily contact with French architects, painters and sculptors from whom they derive inspiration and cultural development as well as instruction.

A wing of the palace had been completely renovated and converted into vast ateliers for architects and painters. The regular classes began on June 25 with eighty-five students enrolled. The Yale School of Fine Arts sent two scholarship students in architecture; the Maryland institute, two in painting; the National Academy of Design showed its confidence in sending the winner of the Mooney Travelling Scholarship—a young man who afterward gained the 1923 Prix de Rome—and many leading art schools were represented in the student body.

The school was placed under the directorship of M. Victor Laloux. The resident director was M. Jacques Carlu, Premier Grand Prix de Rome, who very ably conducted his work. M. Broy, Prix de Rome, and Architect-in-chief of the Palace of Fontainebleau, seconded M. Carlu in instructing the students of architecture. Forty students were enrolled in the department of architecture.

Since the number of students cannot be increased, it is hoped that next year only those best fitted to benefit from the work may form the student body. This can be facilitated by the creation of scholarships ($500 each) endowed by art schools, colleges, architectural clubs and ateliers and awarded to the best students.

PERSONALS

R. C. ARCHER, JR., ARCHITECT, has removed his offices to 1759 U Street, N. W., Washington, D. C.

HOWARD T. YATES has opened an office for the practice of architecture and engineering at 411-412 Dillaye Bldg., Syracuse, N. Y.

SAMUEL LEWIS MALKIND and MARTYN N. WEINSTEIN, ARCHITECTS, have removed their offices to the Chanin Building, 105 Court Street, Brooklyn, N. Y.

BERNARD HERZBRUN has removed his offices to 135 West 42nd Street, New York, where he will practice interior decoration as well as architecture.

The architectural firms of FOLSOM & STANTON and JOHN GRAHAM, JR., have combined under the name of Folsom, Stanton and Graham with offices at 10 South 18th Street, Philadelphia, Pa.

B. H. WHINSTON and H. HURWITZ have formed a co-partnership for the practice of architecture with offices at 41 West 33rd Street, New York.

HENRY H. GUTTERSON, ARCHITECT, has removed his offices to 526 Powell Street, San Francisco, Cal.

L. L. ROBERTSON and L. R. PATTERSON, ARCHITECTS, have opened an office at 310-311 Calumet Building, Miami, Fla.

THE GARGOYLE CLUB

THE monthly meeting of the Gargoyle Club, held at the Hotel Astor, New York, December 18, was presided over by Mr. A. J. Rahm. It is the custom of the Club to hold a dinner at alternate monthly meetings and for the members to take turns in presiding on these occasions. Mr. William Wilson gave an interesting talk illustrated with lantern slides made from pictures he took in Japan, showing buildings before and after the earthquake. Mr. Wilson, who is a structural engineer and has spent three years in Japan, discussed the effects of the earthquake on various types of construction.

The Club has issued a very attractive calendar for the new year, showing a design in pen-and-ink.

Class in Architecture at the Fontainebleau School.

·PENCIL POINTS·
VOLUME V FEBRUARY 1924 NUMBER 2

THE HUMAN ELEMENT IN THE ARCHITECT'S ORGANIZATION

THE interdependence of the architect and the members of his organization makes the human element of the greatest importance. With team work all along the line great things can be accomplished, but with an organization in which there is indifference or friction on the part of various members there is inevitably a serious loss of efficiency. Systems of office management, record keeping, the best of mechanical equipment, all valuable aids in the conduct of an office, are of little avail where the right spirit does not exist. The men may put in the time over their tasks day after day, busy every minute and still fail to produce the results obtainable where there is *esprit de corps,* the spirit of team work, a sense of unity of purpose and of interest, a feeling of responsibility for and pride in the work of the office on the part of every member of the organization.

The January issue of this journal was devoted to the subject of Office and Drafting Room Practice, and the contributions were largely given over to describing the *machinery* of office organization. Good and necessary, but useless without the driving force—spirit. Now we are going to take up the more important matter of "The Human Element in the Architect's Organization," devoting our April issue to this matter. In that issue we want to open up this subject and bring out constructive suggestions from all over the country, with the purpose of providing a basis for improvement.

First and foremost we are going into this with the attitude that all members of an architect's organization from the architect to the office boy have a common interest—the welfare of the business from which they all derive their incomes—it would seem that this is an obvious fact. Furthermore, we are going into it on the basis that there is room for improvement on the part of every member of the organization, including the architect, in a great many offices. But we mean to assume that everybody has a sincere desire to contribute to the general improvement by improving himself as well as the other fellow. Let us hold the ideal of an organization in which there is community of interest and let us measure existing conditions against that standard, striving to see clearly the means by which an approximation to our ideal can be achieved. This will involve laying bare cases that are not by any means ideal, but let us do it in a constructive spirit.

Now, in going about this it will not avail us anything to say over and over that team work is desirable, having said it once and accepted the fact, let us have the statement of ways in which this has been brought about and suggestions of a practical nature. We want you to give the benefit of your observation and experience to the other readers of PENCIL POINTS by writing a letter for publication. We want experiences and ideas, and names will *not* be used without special permission of the writers of these contributions, so no embarrassment need be felt—speak out, architects, draftsmen, specification writers, let's talk this over together.

We are now making the announcement of this subject for discussion in our April issue in order that we may have a mass of material in hand long enough before the date of publication to enable us to present a discussion that will be of the greatest possible help in bringing about the best conditions within the architectural profession, for the good of everyone.

In this we look for the same ready and hearty response we have had in the discussion of other subjects. The more letters we receive the greater will be the fund of ideas from which all may draw. Write us an informal letter as short or as long as you please, but let us hear from you.

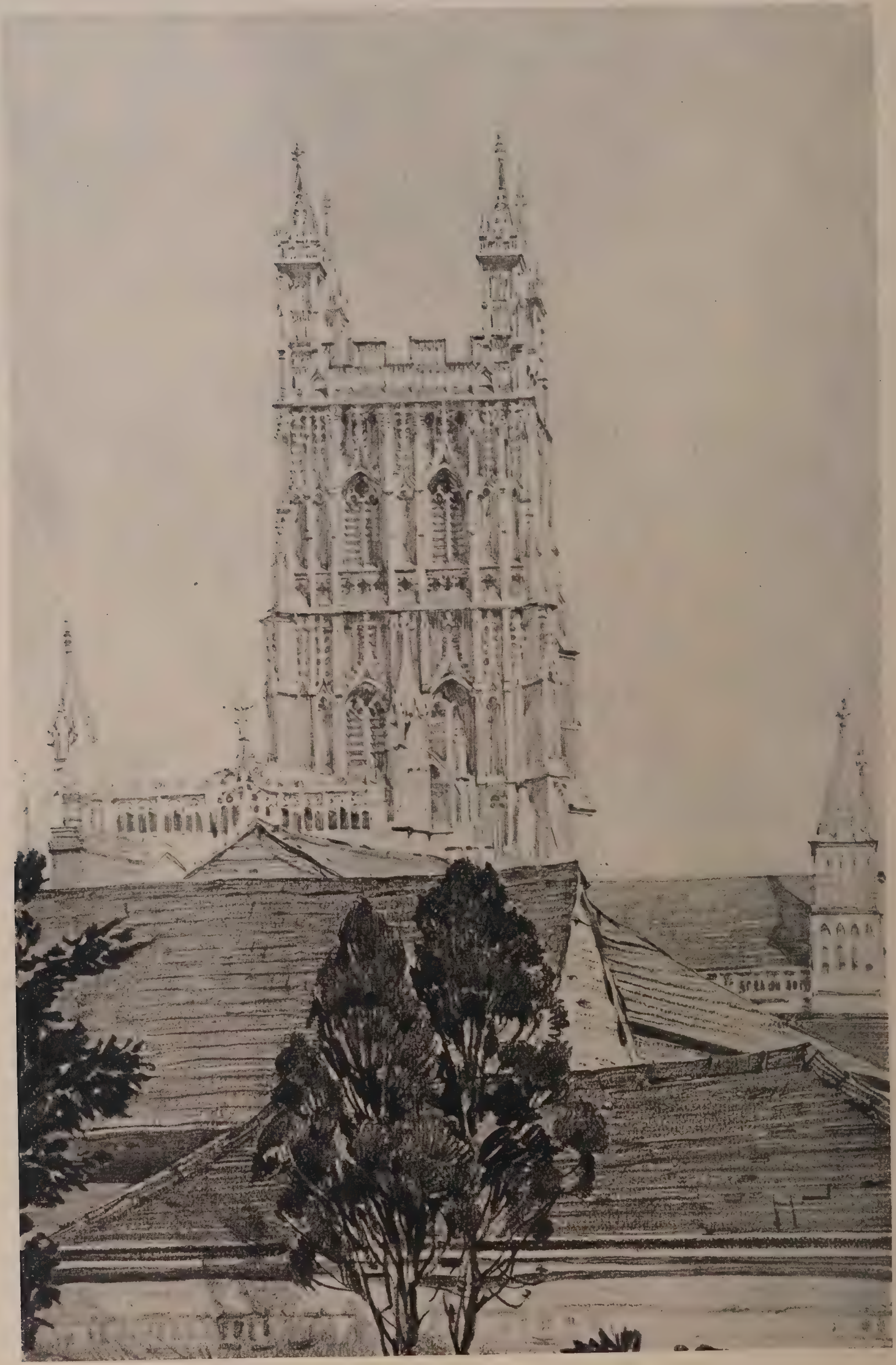
THE BEAUX ARTS BALL

ON THE evening of Friday, February 8, beginning at ten o'clock, the Beaux Arts Ball, *Carnival de Paris,* will be given by the Society of Beaux Arts Architects at the Hotel Astor, New York City. This ball will be for the benefit of the students in architecture, painting and sculpture of the Beaux Arts Institute of Design.

Fancy costume will be obligatory and must be worn throughout the evening. Guests are urged to form costume groups in order to enhance the effectiveness of the *Grand Defilé* which will take place just before supper.

The carnival will include side-shows, contests, acts, etc., a veritable Fête de Neuilly executed in the true Parisian spirit to the music of several orchestras and bands under the direction of Markels.

Applications for admission tickets and reservations for boxes and tables, accompanied by check, should be sent Kenneth M. Murchinson, 101 Park Avenue, New York City.



Pencil Drawing by Kenneth Conant, Gloucester Cathedral.
(Reproduced at the exact size of the Original)

DRAWING IN PENCIL

BY KENNETH CONANT

In this article Mr. Conant describes his method of drawing and discusses different methods of making pencil sketches. Mr. Conant is an instructor at Harvard University, has spent much time sketching abroad and was the winner of the first prize in the Birch Burdette Long Sketch Competition for 1922. Readers of PENCIL POINTS *are familiar with Mr. Conant's excellent pencil sketches through the reproductions that have appeared from time to time in this journal.*—ED.

ALMOST all of my own drawings have been made in connection with studies in architectural history, and have therefore a meticulous character. This is the result of my inclination and interest rather than of any idea that an infinity of fine detail makes a good drawing. It takes more art, I think, to express a thing in two lines than to do it in twenty; and a competent and stylish drawing in very simple terms calls for just as intimate an acquaintance with the subject as a much more elaborate one. The thought back of a worth-while simple drawing must be direct and mature, and the ability to carry out such a thought is a rare gift.

The fact that in a drawing containing much incident and detail the interest is more diffused than in a simpler drawing, and the individual lines are thus less in evidence, should not blind the artist to the fact that, if his work is to be distinguished, each line should be careful and appropriate. There is, of course, a kind of easy "digital rapture", which comes with training and skill such that an experienced draftsman does not actually think of every line, any more than an experienced pianist thinks of every note in a trill. It remains nevertheless true that the trained artist's individual lines and tones have beauty and character, and that his drawing is a sum of beautiful lines. The man whose hand is a less spontaneous servant of his impressions and emotions must be more careful in making the separate elements—lines—of which his drawing is built. A charming teacher whom I know sometimes says of student work, "More lines than thoughts"; there is no more polite or more definite way of condemning a drawing (Figure 1).

Clearly the execution should be uniformly good over the whole surface of a drawing. It is a great mistake to suppose that the odd corners, away from the center of interest, may be carried out carelessly. In the eyes of a good critic any careless work detracts from a drawing. Nothing has a place in a composition which does not contribute to its clearness and beauty.

Need the fact that a drawing should be uniformly good execution entail its being an "imitation photograph"? Not at all, though that is a danger. A photograph gives the evident facts about an arrangement of objects—gives them quickly, accurately, and cheaply. Except for practice, it is not sensible to set out to do this work by hand, a much more uncertain and laborious process. Any drawing worthy of the name is an interpretation. Those whose work gives us the facts without interpretation are organ-grinders in art. The artist's business is to choose a subject and render it expressively, and then to arrange the subsidiary visual material around it so as to give it an orderly and interesting setting. The artist who really feels and understands his subject (*nothing is more necessary*) will be able instinctively to find the center of interest, the "eyes" of it, and to compose the surroundings to lead up to it and give it the atmosphere and value desired (Figures 2, 3, 4, 5). I do not mean that the total effect need be very different from what the artist sees. But I do mean that what appears in a picture should be recast according to an idea, in order to make the composition an orderly and organized whole. This is the province of personality and interpretation, and it is the way to avoid making imitation photographs. We may use the parallel of language, which expresses another kind of idea in another way. Good speakers and writers are able to choose a suitable subject and make it lucid and interesting by the clearness of their own grasp, by their ability to arrange their material so as to bring out the principal point, and by their pleasing address. That is the case of a competent artist exactly.

In my own work I do not hesitate to draw from two or more points of view (not, of course, widely separated), if it helps to arrange the picture better, or to make the planes read more easily. This may be very convenient in a street scene, for example, where parts of an uninteresting building in the foreground may interfere with a delightful part of the background in an otherwise agreeable view (Fig. 4). It is usually possible to manoeuver so as to avoid such a difficulty. The picture then becomes a composite one, and, in a strict sense, untruthful. But it is to be remembered that our impressions of most things are composite, the result of seeing them from many points of view. In the same way, I do not hesitate to use shadows as they appear on the same building at different hours if it helps the composition in unity or interest, and does not bring about a manifest inconsistency. If the shadow of a buttress on a tower is prettiest at half-past one and the light effect on a neighboring chapel is handsomest at half-past two, I am not likely to let either effect go, as the camera would have to do. A good rule to follow is to do nothing which will seem obtrusively out of the way to one who knows well and cares for the subject of the picture.

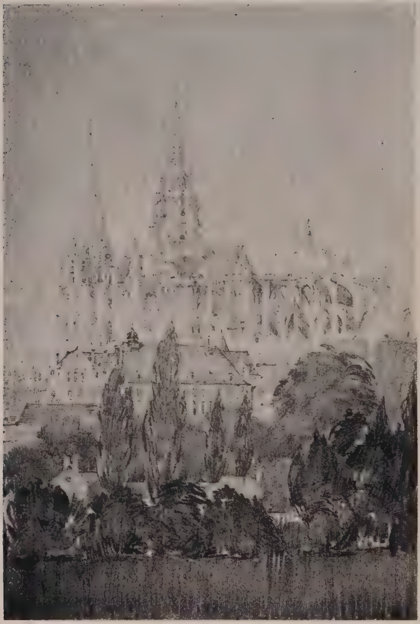


Figure 1

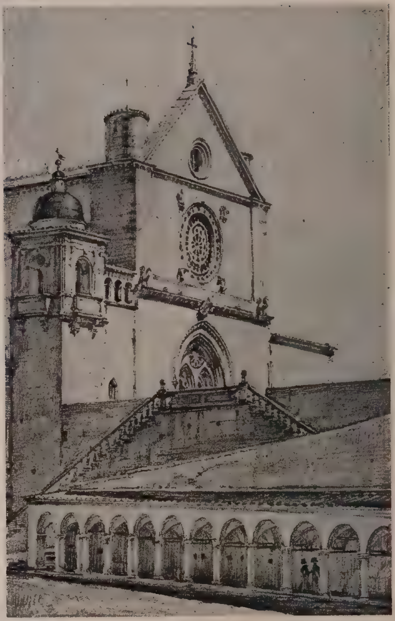


Figure 5

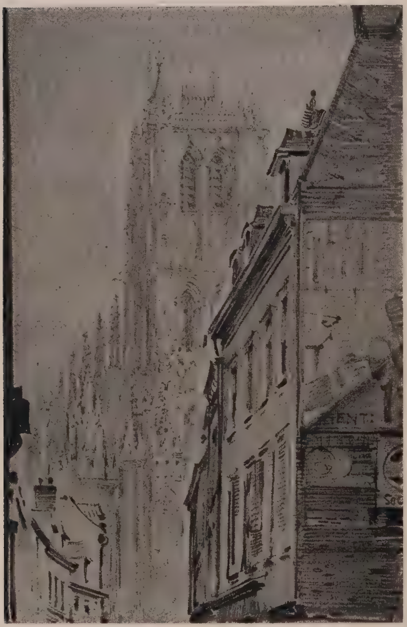


Figure 4

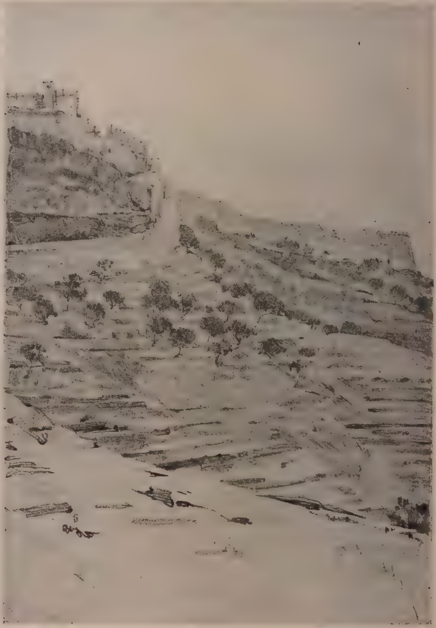


Figure 6

Figure 1. *Drawing spoiled by careless foreground. Figure* 4. *Poor composition. The foreground is too obtrusive, and the eye is not led easily into the picture. Figure* 5. *Poor composition. The inclined lines in the foreground are not pleasantly related, and the eye does not find its way easily from them to the facade above. Figure* 6. *Poor composition. Uninteresting pattern, not relieved by play of light or contrast.*

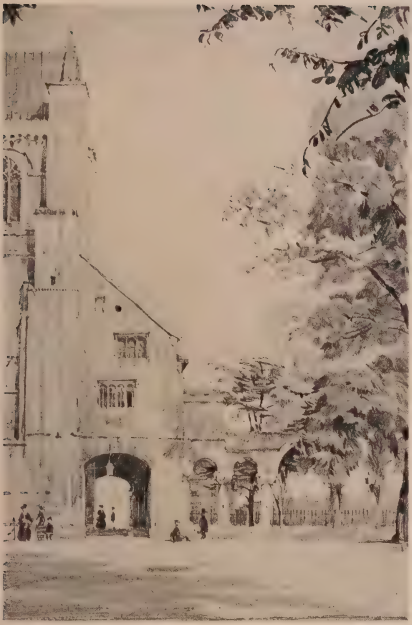


Figure 2. Poor composition. The visual material is scattered around the edge of the picture, leading up to nothing, with the result that the picture is blank and uninteresting.

Many young draftsmen try to get personality into their pictures by trickiness of line and handling. That is insincere, and an offense against good craftsmanship. The artist's approach to his work should be straight-forward. Attempts to make "peppy" drawings with an exaggerated technique may well deform or defer the ripening of a genuine personal style. Drawings which depend for their character on imitation of the mannerisms of admired artists have also undoubtedly specious appeal. The peculiarities which make up a personal style are determined by the great interests, and, quite as much, by the limitations of the artist. A man interested in archaeology who draws figures badly will naturally put his best efforts into the architecture he is rendering, to the neglect of his figures. If people like his architectural work and encourage him; his best efforts will go to improving that, his figures will come to be incidental, and the sentiment of his work a detached one. The cartoonist and lover of life will make drawings of a much less abstract character; his streets will flow with a living and human tide; in his architectural work we need not look for the soberer qualities which charm us in the other man's work. The man who draws best with a short staccato line will find himself interested in drawing effects which can best be rendered by such a line. The man who draws boldly will avoid intricate and delicate effects. The basis of good drawing must be easy and natural workmanship rather than imitation.

Any drawing, even the most studied imitation photograph, must necessarily be much simplified in comparison with nature. The range of possibilities is at best very much less—that is to say, no drawing can possibly have the full vivacity and complete detail of nature. A vivacious drawing is so because the detail is simplified, or so artfully disposed that it does not detract from the directness of appeal of the drawing. Refreshing directness comes most often in drawings which are quickly, easily and directly done. A drawing with a great deal of detail takes longer to carry out, and it can never have anything approaching the contrasts of nature. Artists choose between the alternatives according to temperament.

We all want to make our drawings as vivacious as may be according to our styles. There are several modes of drawing which are useful in different ways to bring about the simplification on which vivacity depends.

First, drawing in the manner of delineation, using no tones, no shadows—lines. Delineation gives the essence, a shorthand interpretation of the subject.

Second, form drawing, using shadows only and supplementing the work with lines where necessary. This is, in effect, drawing all things as if they were made of white plaster, paying no attention to local colors. Thus a bronze statue and a plaster cast of

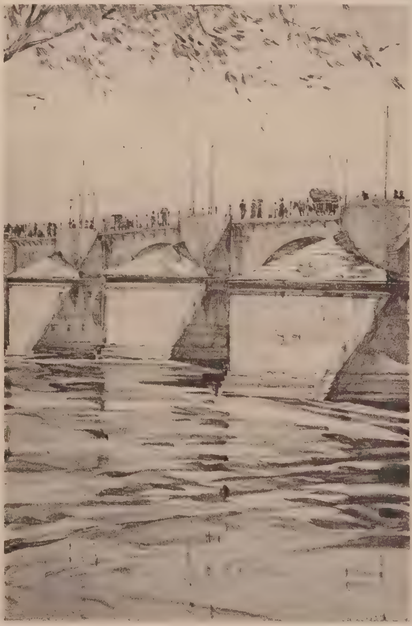


Figure 3. Poor composition. Nothing leads into the picture. It is actually difficult to make out what the subject of the picture is because of the lack of setting.

the same would appear just alike in a form drawing. Form drawings are particularly successful in sunlight effects, because they present the subject in terms of its own shadows; the unshaded portions of the drawing seem, by contrast, to be bathed in sunlight.

Third, color value drawing with shadows expressed and local color indicated by grey tones, light or dark. In a color value drawing the statue mentioned above would be darker than the cast because of the difference in the color of the material. A color value drawing is more or less a photograph, but it need not have the infinite value gradations of a photograph. Much more effective drawings can be made by summarizing the values, reducing them (in general effect) to three, or at most four. The drawing is certain to gain an incisiveness by this sacrifice; the eye will find its way about in the composition much more easily. The appeal, particularly from a distance, will be much more forceful. This is the reason why well-handled drawings make so much better wall decorations than photographs (where the directness is frittered away in nuances.)

Fourth, a drawing of the first two classes may be tinted. Admirable shorthand color effects are obtainable, using a few well chosen colors. Good drawings of this type are distinguished by a free and easy dash because the vivacity of the line is not obscured by subtleties of color-modeling.

Fifth, drawing or painting in full color, which is outside my subject.

Now while a drawing may be carried out consistently in any one of these modes, their great use is in suggesting simplification which may be employed to make the rendering or the composition clearer. For example, I, with my preference for out-door subjects in sunlight, usually find myself making a form drawing of the kernel of my picture, using delineation and color value elsewhere as the composition dictates. A dark object which, rendered dark, would detract from the center of interest, I render by delineation, so that it contributes what it has that is useful to the picture; the rest is left out. I may render a lacy grey tower in form drawing, which leaves the stones white in sunlight, and render grey houses at its base in color value, making the sunlit stones grey in this case because the contrast is valuable; and I may leave the grey street in front of them white (delineation) if this detaches the houses better from the foreground. The convention of rendering in different modes can thus help in two ways—first, in making the composition-pattern agreeable—that is, making the arrangement of light and dark spots within the frame agreeable quite irrespective of what they represent or where it is with reference to the picture-plane. No drawing can be called a success which is lacking in this particular (Fig. 6). Modernist drawings, ordinarily so notably unsatisfactory with regard to mere representation, often have piquant and interesting arrangements of their elements considered as spots. A stupid composition-pattern makes a stupid drawing even though the workmanship is good. There is, of course, no recipe or patent way for making good compositions. But it is true that a good composition is one in which the various areas or parts are agreeable shapes thoughtfully arranged, so that the eye finds its way easily to the principal subject (Fig. 5). Some compositions may be good and dull, like a prosy preacher; others may be good and interesting, like a fire-eating evangelist. The difference is generally to be found in the general pattern or parti—dull parti, dull picture, interesting parti, entertaining picture.

The second way in which drawing in different modes can help the artist is in expressing the planes in the picture, giving it depth and atmosphere. Color value, which gives the most information and the greatest contrasts, may be used in the foreground, where the form and details of objects are clearest. Form drawing (less complete) may be used for the middle distance, where form and detail are still easily distinguishable; more distant objects may be rendered by delineation.

These two ways of using the modes may conflict in a given picture; then it is for the artist to use his artistry. The usual scheme is to subdue the contrasts in succeeding planes into the distance, as in nature; yet occasionally, when it is desired to focus attention on a single spot in the distance, the reverse scheme is employed.

In my drawing of Gloucester Cathedral, reproduced on page 26, I carried out the upper stage of the tower and its pinnacles in form drawing to get as delicate and sunny an effect as possible. The lower stage is in color value, to give a little more solidity, to set off the contrasts above and the little turret in front. This pair of turrets is in delineation—the one just referred to left white in order to detach it as much as possible from its background. I did its companion in delineation because I did not want to draw too much attention to it nor to continue up the dark band formed by the tree at the left of the picture. I made the shadows on the little connecting gallery sharper than those on the tower because the gallery is nearer.

The four parallel roofs are carried out in color value, but successively paler in tone to give the effect of distance. The other roof is lighter because the sun strikes it more directly, and the lighter tone makes a pleasant break in that part of the drawing. I can remember working out the arrangement of these roofs with much care in order to get them to "read" easily. It is not an accident that the ridge of the nearest one cuts into the eaves shadow just above it, that the second ridge is higher than that of the church transept, or that the tree goes a little higher still. I used three or four points of view, all within a few yards of one another, but kept fairly close to what I saw. The church is meant to tell more or less as light a tone; the roofs in the middle distance make a second and darker tone; the trees in the foreground tell as a third and darkest tone.

(*Continued on Page* 36)

THE SKETCH PROBLEM, PART III

The First Preliminary Competition for the Paris Prize

BY JOHN F. HARBESON

In this article Mr. Harbeson treats the sketch problem in the same manner in which he has discussed other problems in the pages of this journal under the general heading "The Study of Architectural Design."

IF WE consider now the plan sketch problem we find it similar in some ways to the decorative sketch problem, and very different in other ways.

The parti becomes most important now: the parti *must* be a solution of the problem, satisfying all its conditions; and this satisfaction is now quite largely a question of logic, of reasoning, and no longer a question of individual taste, as was the case, very frequently, in the decorative sketch problem. The importance of a good parti cannot be too much stressed; the man who has the ability to find a good parti can be a successful architect, even if he cannot draw—he can hire men to do his drawing. It is not so easy to hire men to find a parti.

The preliminary work in an esquisse is to understand the program and find a solution for it. Become thoroughly familiar with the program; read it several times, paying attention to every word, for each word is put in for some particular purpose. Then separate what is important from the minor requirements—try to find the spirit of the problem: a military barracks, for instance, must have a different character from a seashore hotel.

One looking at a sketch problem, without having read the program, should be able to tell what general type of building it is. This means of course, that to do a good sketch problem you must know the general character of different types of buildings. An industrial building, for instance, will have a rectangular outline, with businesslike poche—no elaborate gardening about it. (Figs. 24 and 25). Then you must determine under what heading the requirements will fall, and this means more than just a casual setting down of the requirements. In a "technical school"—such as Figs. 22 and 23—(January Pencil Points) there will be required several classrooms, but some of these classrooms will be just like the classrooms where any other teaching is done—language, mathematics, or history, for instance—while others will be classrooms for technical teaching, and will be quite different. In a sketch problem, such differences as these are emphasized.

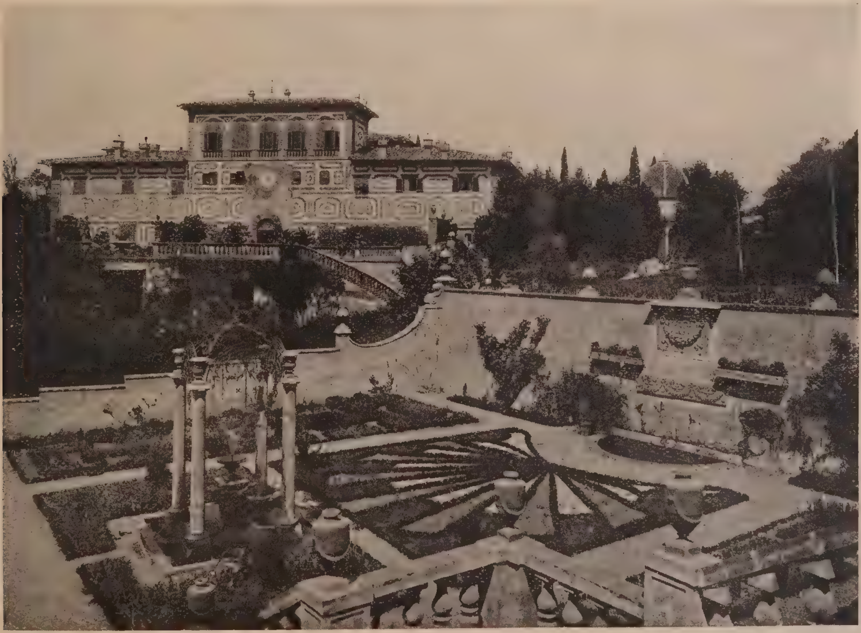


Fig. 27. Villa Palmieri—Garden Front.

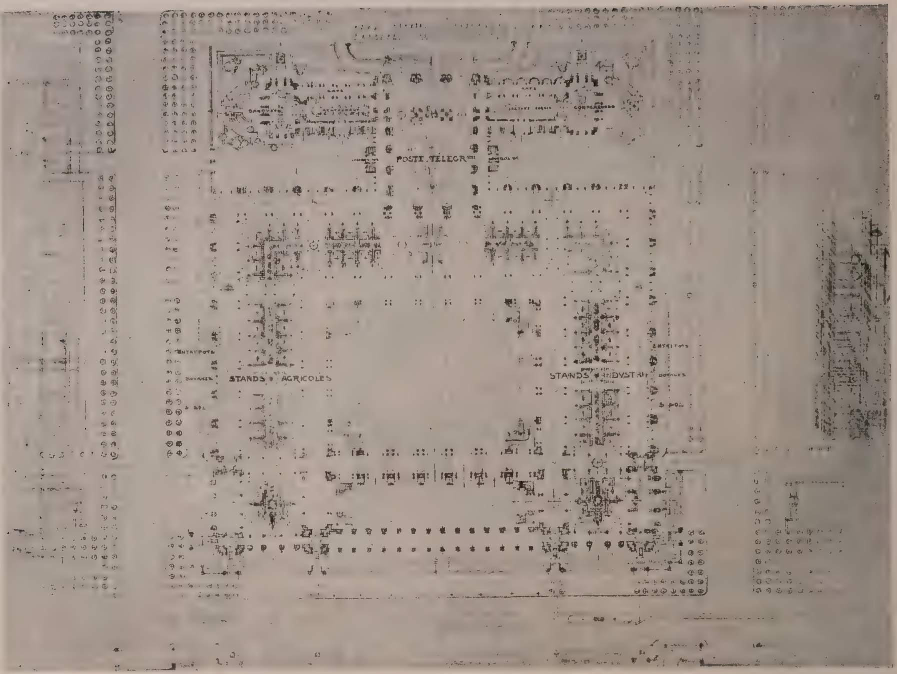


Fig. 25. Design by M. Bray, Pupil of M. Pascal, for "Une Bourse du Commerce et de l'Industrie." 24 Hour Sketch Problem, Ecole des Beaux Arts.

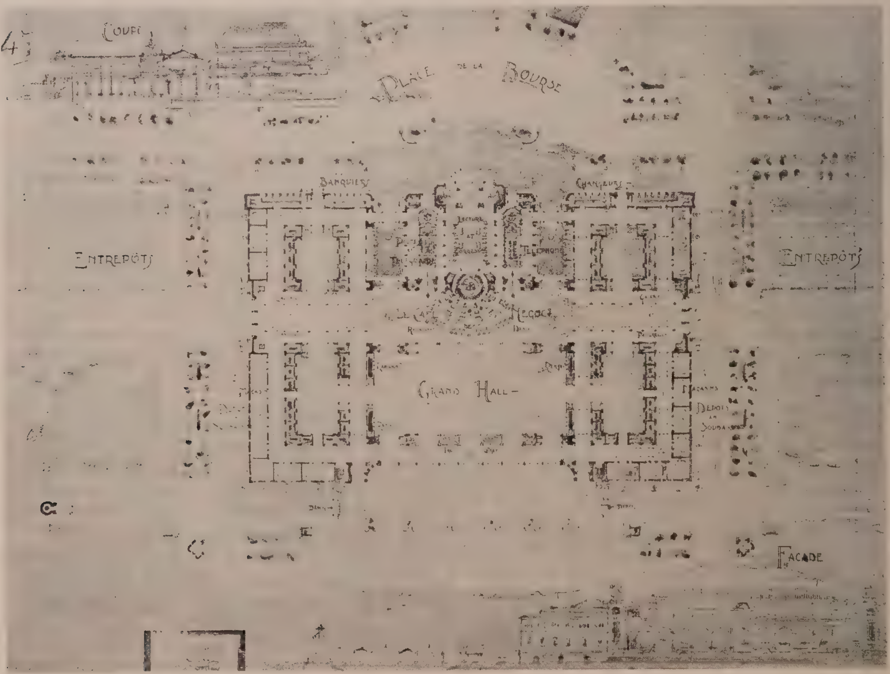


Fig. 24. Design by M. Delaitre, Pupil of M. Deglane, for "Une Bourse du Commerce et de l'Industrie." 24 Hour Sketch Problem, Ecole des Beaux Arts.

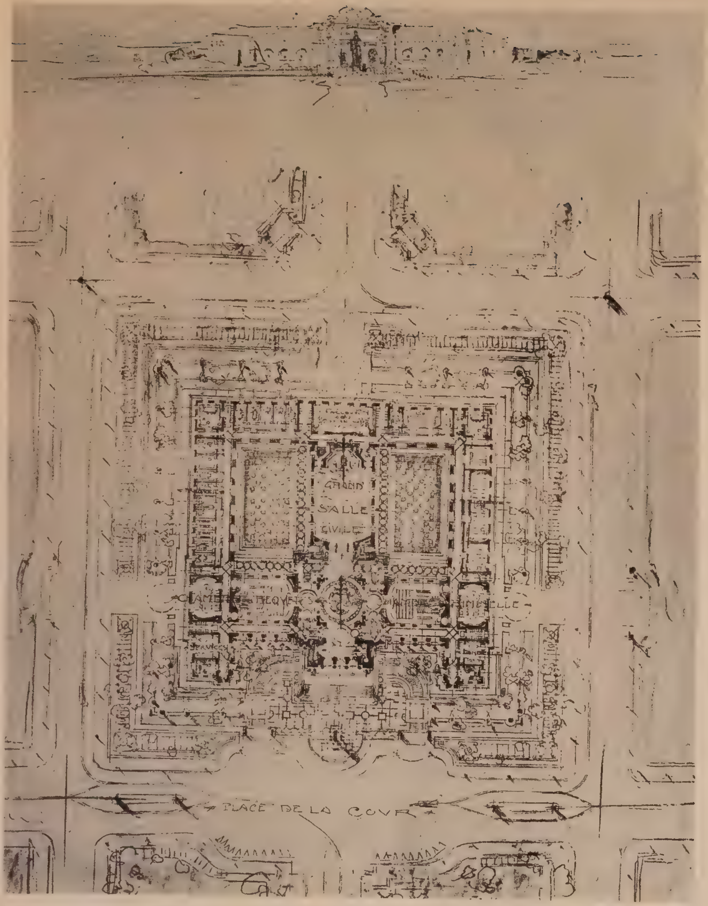


Fig. 28. Design by M. Durand, Pupil of M. Deglane, for "Palais pour La Cour de Cassation." 24 Hour Sketch, Ecole des Beaux Arts.

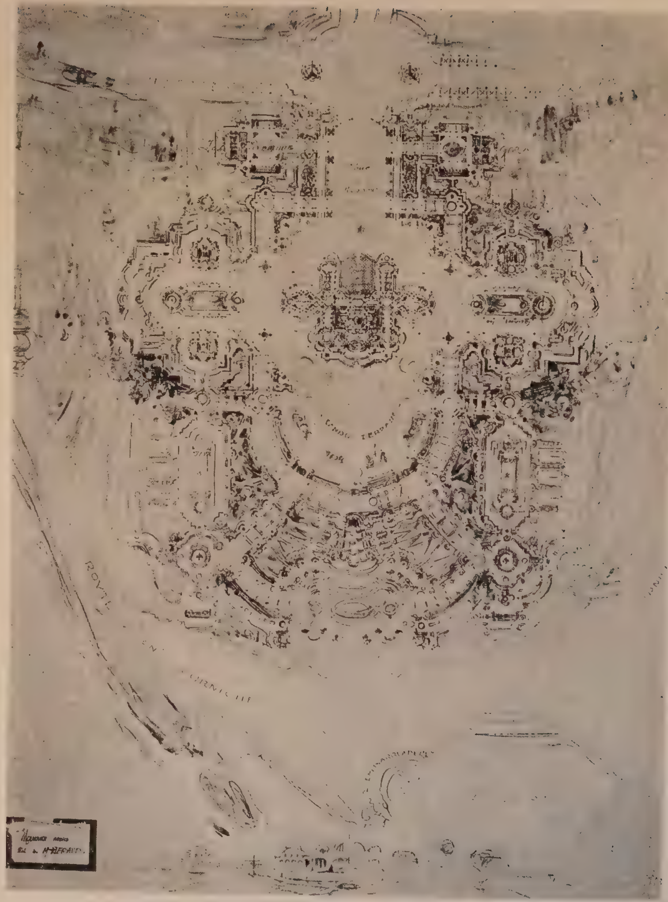


Fig. 29. Design by M. André, Pupil of M. Héraud, for "Une Residence pour un Chef d'Etat." Concours Labarre, Ecole des Beaux Arts.

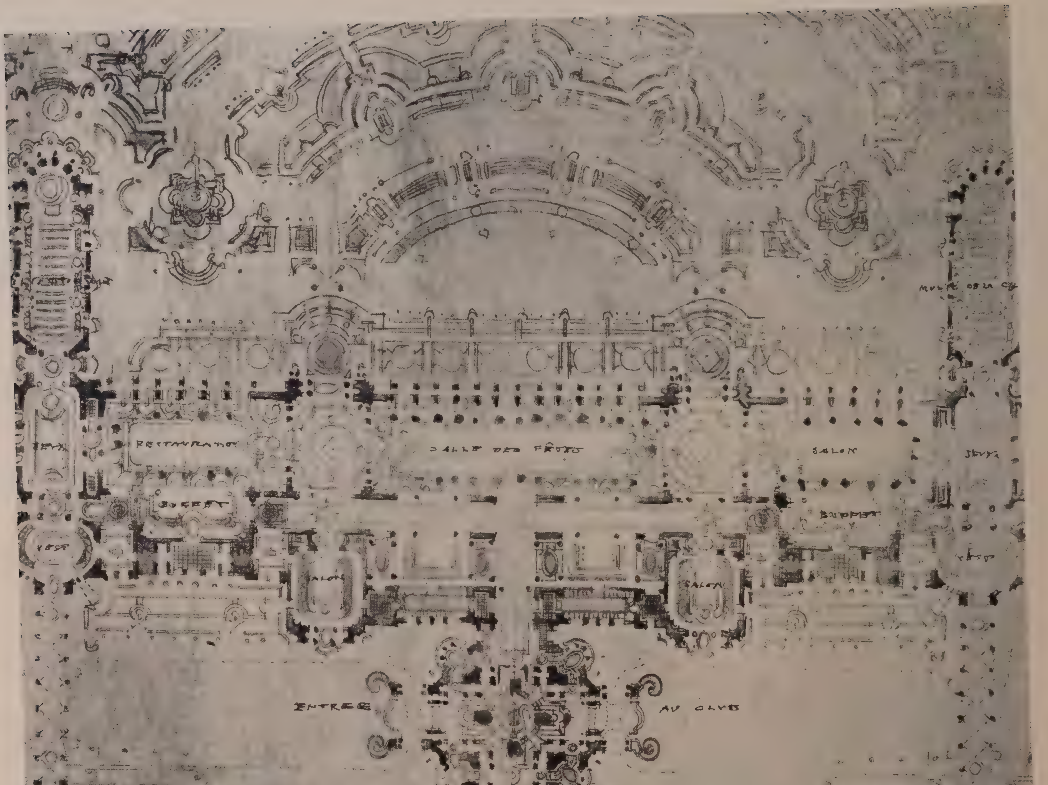


Fig. 31. Detail of Design for a Concert Hall, by D. M. Kirkpatrick, Concours Labarre, Ecole des Beaux Arts.

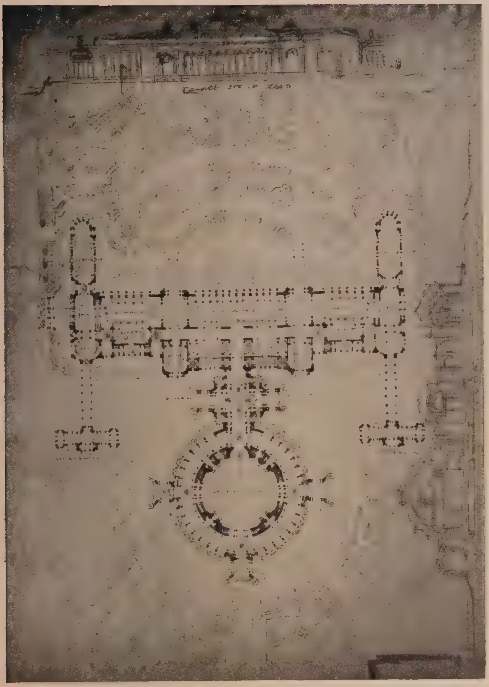


Fig. 30. Design for a Concert Hall, by D. M. Kirkpatrick, Concours Labarre, Ecole des Beaux Arts.

In a sketch problem you must force the requirements a little to make them more apparent. It is just as in a poster, one exaggerates the drawing to make it "carry", to force an idea. You should be able to read an esquisse from a distance: it should be clear, and show the details of the program without requiring one to take the program and check it out to see if all the requirements are met.

Another important item in finding a parti is to take account of location. Whenever a program mentions the character of the site (on a hillside, on flat ground, on the shore of a lake)—that is a hint to especially emphasize this requirement. Make it absolutely clear—to some extent exaggerate it.

And as it is necessary to think clearly to find a parti, eliminate the unessential: do not worry, in an esquisse-esquisse, whether or not "the office of the manager is next to the general office": you cannot go into detail.

It is important to get the proper scale at the beginning; mark in the corner of your paper—the backing paper over which you make your first studies—a drawn scale, 10, 20, 50 feet, so that you will always have an idea of size before you. Once you have this in mind you do not need again to use a scale until you go to final scale, when the process is repeated.

If your drawing is "out of scale" at all, it is better that it be a little below scale than otherwise: this will make the building look larger than it is.

We have already spoken of the division of time in a sketch problem—how long to spend on the study of the program, on study at small scale, when is the proper time to go to large scale. Each man has a different way of working—and at different speed. After you have done several sketch problems, you will know how long it takes to make the final drawings, and you must leave enough time for this purpose. It is largely a personal question, and no fixed rules can be given; the presentation, however,—the drawing at final scale—will take by far the largest part of the time, two-thirds or more.

Make sketches at a small scale to find the solution—a parti that will "work". Do not be satisfied if it does not, for no amount of presentation will disguise this fact.

Then go at once to the final scale. Put down the size of the lot, the areas of any rooms given, and again a visual scale.

Now with charcoal block in your scheme, get the big picture—the big masses.

One thing which is important (and it is important for every composition in fact) is that your drawing should have a dominant part. *Avoid* having *several* "important" parts, all about the same size. In any decorative composition where all of the motives are of the same size there is no interest in any of them. In an Italian building, it is

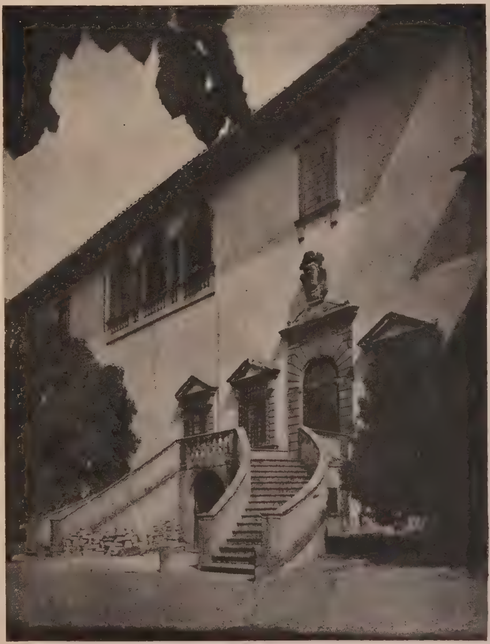


Fig. 26. Villa dei Collazzi, South Side.

the big blank wall which sets off the few spots of interest. (Fig. 26). If you *cover* a wall with the most interesting ornament it is no longer interesting (Fig. 27). In this example compare the façade of the villa, with its all-over ornament, with the garden wall in the foreground with its plain surface and spots.

One feature must be made the prominent part of the composition—the key to the whole thing. This one feature (in a plan problem) is not necessarily the building. It may be a "white", a garden, for instance, or a "Public Square" (as in the Grand Prix design of Jausseley, Fig. 129, in my article in Pencil Points for February 1922), and yet be the center key of the composition. This example is a "Warren Prize" drawing: in this competition documents and criticisms may be used, and we shall have something further to say of it later on. This is, however, a good example of a well presented sketch problem. In other cases a building is in the center, and if it is a large building, some portion of it is chosen and featured, as the "focus" of the composition, as in Figure 28.

If the program requires several buildings, it will be necessary to compose "entourage" around them. In an esquisse-esquisse this should not be done in a separate operation—it should all be done at the same time, for both it and the buildings are parts of what *is a single decorative composition* as well as a plan problem. You compose with the open spaces just as much as with the buildings.

In some problems the site is so cramped that the building required just fits it, as in Figs. 24 and 25. In others the site is more ample, as in Figure 29. In such cases it is well to start the big scheme in composition by laying out the two big axes, at right angles to each other, and arrange the buildings on or about them afterward—working first the roads, the circulations, the gardens, etc.

This is not unreasonable. If you have a large group of buildings, the buildings are not important in themselves, so far as the composition is concerned: it is the grouping which makes the composition—the planning of the open spaces, not the buildings. So, in large composition, do not start by taking the requirements and working up each building—you will find it more satisfactory to design the courtyard, or the plaza, and place the buildings around it, especially for the esquisse-esquisse.

There are problems where the site given has special topographical conditions—sloping ground, or ground open toward a sea. Here again it is much more important to compose with the open spaces than with the buildings. Work it all at the same time.

If the program calls for one building and this building, from the requirements given, about fills the size of paper or card allowed, the design of the entourage is not important. For this reason it is well, after reading the program, if it calls for a single building, and says the lot is, say, 300 by 400 feet, and at such and such a scale, to find out how much of the paper is occupied by this building, and you see right away how much is left for a plaza in front, etc. If there is plenty of room, study its composition with that inside the lot; if there is little do not spend much time on it, for a few lines will be all that is necessary; then think of the building only. The elevation and section do not take much room or require much time.

In making the final drawing do not be afraid of putting in too many lines—some of them can easily be lost in the rendering, if that should be desirable; while too few lines always give a plan an empty look. As an interesting example of the technique of presentation we show Fig. 30, a problem entered in the Labarre competition at the Ecole des Beaux Arts by D. M. Kirkpatrick (Paris Prize 1912) and a detail portion of it at larger scale, Fig. 31.

DRAWING IN PENCIL

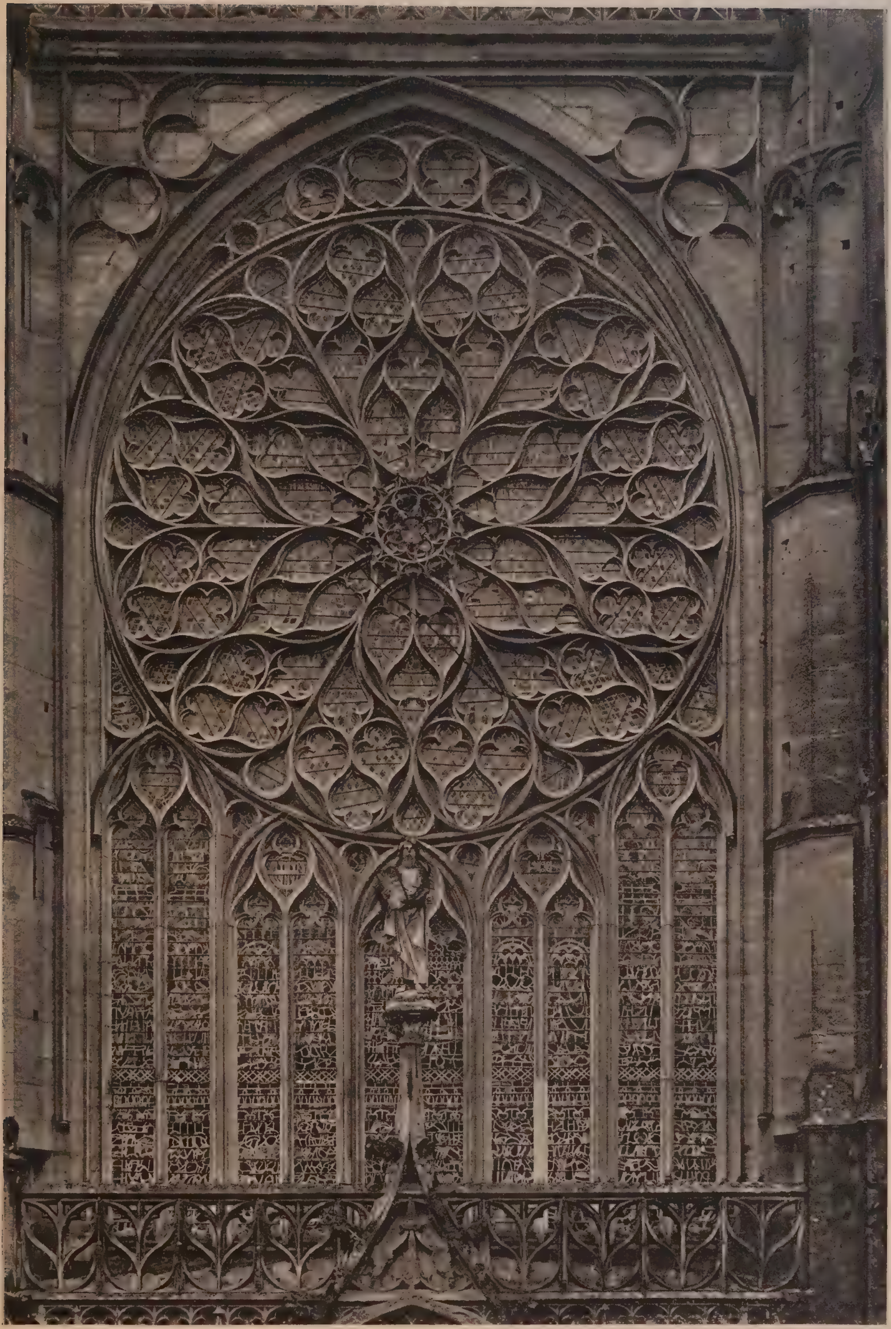
(*Continued from Page* 30)

I have been asked about my technical habits in drawing—among other things, about the number and grade of pencils I use. I generally content myself with two while at work outdoors, an F and a B, though I find it necessary to vary these on account of temperature, humidity, and dust. The difference between working on humid paper in shadow and on dusty paper with the hot sun beating on it is surprising. I find it a good thing, therefore, to carry quite a number of grades with me, and I generally include a rather hard pencil, H or 2H, for extremely delicate effects in the distance and clouds.

Different grades of pencil may be used to make very varied surface or texture effects on the paper. A foreground carried out in big strokes of a soft pencil will easily take its place in front of a background of precise strokes made with a hard pencil. Texture effects may be combined, as well; for example, a patch of smooth, dark tone made by pressing on an F very hard may be relieved and livened by free strokes with a 2B or 3B pencil. Again, a passage freely drawn with a B or HB may be lowered in value by a smooth, transparent overlay carried out with an H pencil. Very often work of this latter kind can be done much better at home than outdoors. I quite ordinarily rework my drawings a little. It is a thing to be done with caution. Some artists use their outdoor work merely as data, doing the final drawing entirely in the studio, but a great many men are unable to do effective work in this way.

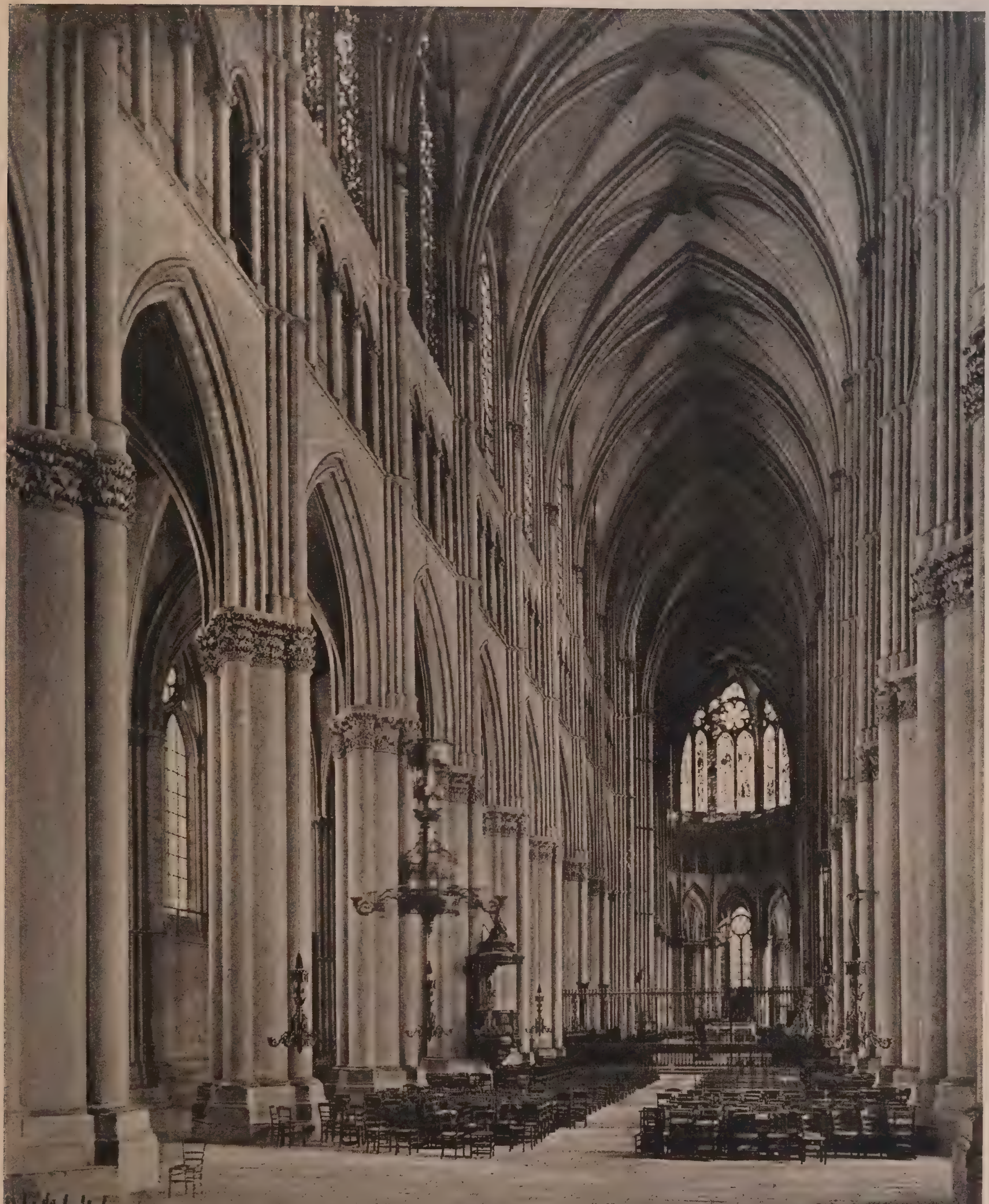
I have for a long time drawn "tracing size," that is, making my picture the size of the visual image at my paper's distance. I am convinced that this manner of drawing makes it easier to get the positions, measures, and shapes correctly. Less preoccupied with making the work merely correct, one's attention is freer to consider stylish execution. Important, too, is the fact that the number of construction lines may be reduced, and the work thus kept cleaner than it is possible where the hand is rubbing back and forth over such lines. In delicate

(*Continued on Page* 57)



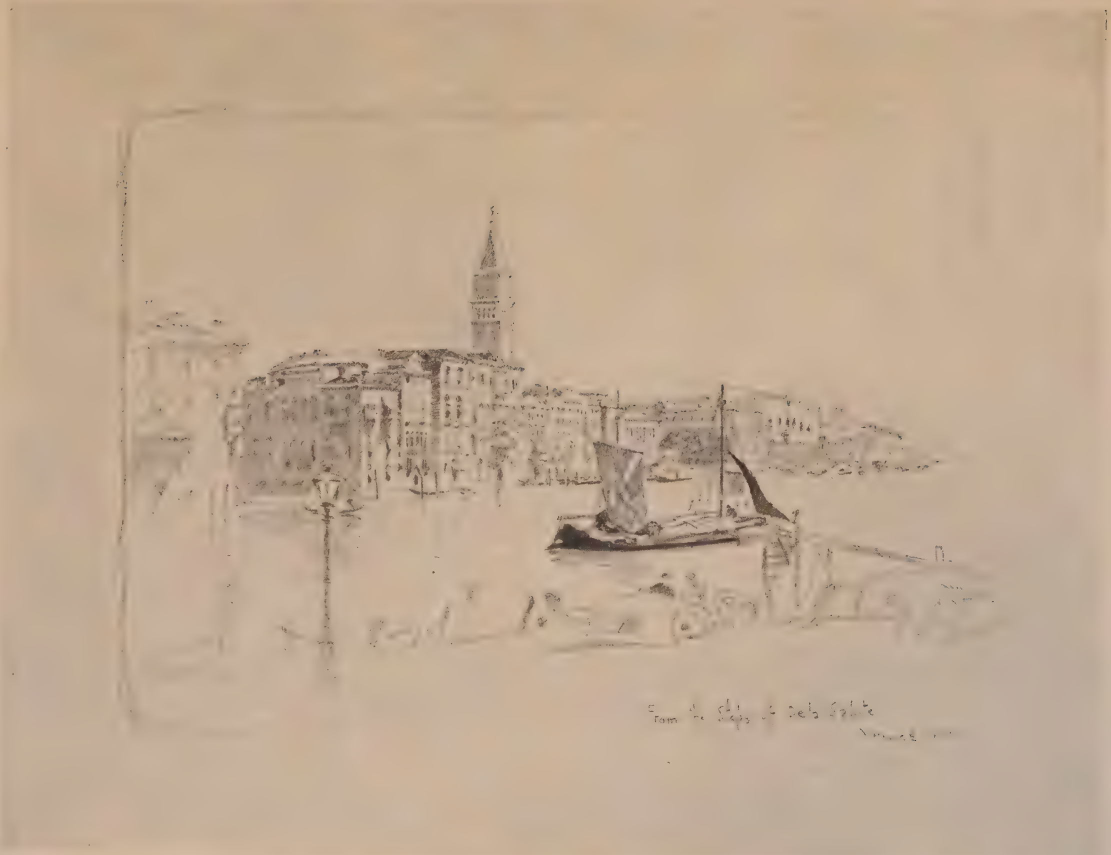
ROSE WINDOW, SOUTH TRANSEPT, CATHEDRAL OF SENS.
FROM "SELECTED MONUMENTS OF FRENCH GOTHIC ARCHITECTURE"

The charming rose window of the south transept of the Cathedral of Sens is well shown in the photographic view reproduced on the other side of this sheet from the archives of the French Commission of Historic Monuments.



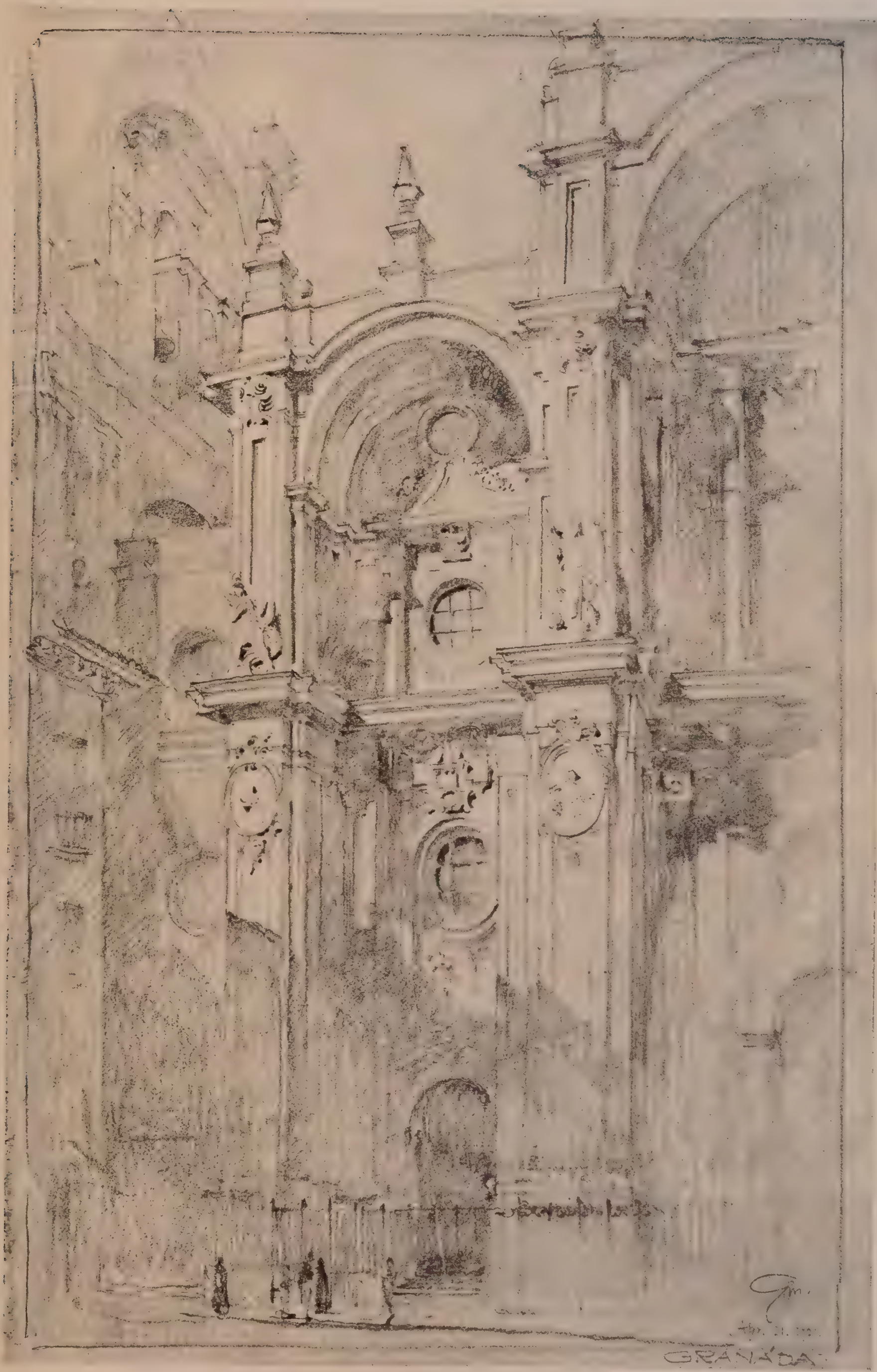
REIMS CATHEDRAL
FROM "SELECTED MONUMENTS OF FRENCH GOTHIC ARCHITECTURE"

The interior view reproduced on the other side of this sheet conveys much of the nobility of beautiful Reims Cathedral. This view, like the one reproduced on Plate V of this issue, is from the archives of the Commission of Historic Monuments.


From the Steps of Della Salute
Venice

PENCIL SKETCH, BY C. D. MAGINNIS. VIEW FROM THE STEPS OF DELLA SALUTE, VENICE

One of the many delightful pencil sketches made by C. D. Maginnis, of the firm of Maginnis & Walsh, architects, Boston, is shown on the other side of this sheet. Pencil drawings by Mr. Maginnis always have a special charm due to the simplicity and sensitiveness that marks them and this journal has fortunately been able to reproduce a number of these sketches through the courtesy of Mr. Maginnis.



PENCIL SKETCH, BY PAUL GMELIN, THE CATHEDRAL, GRANADA

An unusually interesting pencil drawing is the study of the Cathedral at Granada by Mr. Gmelin which is reproduced on the other side of this sheet. It presents a very effective and useful method of recording both the spirit and the architectural features of a building.

THE TECHNIQUE OF RENDERING, PART V.

BY FRANCIS S. SWALES

In the serial article of which this is the fifth installment Mr. Swales explains practical methods of rendering. These methods, though based on what may be regarded as standard practice include variants that have been found effective in actual work. In preparing this article Mr. Swales has drawn freely upon the fund of experience he has gained in his architectural work.—ED.

IN AN earlier part of this article it was stated that a good rendering implied a good drawing; but it might have been stated that a good drawing in the sense of a well-studied, finished diagram is a good rendering, but lacking the third dimension. Upon line-technique depends the effect of the scale of the design perhaps more than upon anything else. Human figures, trees, balustrades, steps, stone jointing, etc., all help in conveying the intended sense of scale conceived by the designer, but without much of such assistance scale—which is half the battle in all designing—can be well or deceptively conveyed by the use of the right or wrong weight and quality of line. One does not have to use a scale in order to know the sizes of the parts of the design with relation to average human stature in such drawings as Figures 30 and 32 (December PENCIL POINTS) even though there is no human figure on the drawing. The scale of the stone work alone is sufficient to enable one to estimate approximately the size of the whole, and of any part of the building.

The work of that great organization of architects known as McKim, Mead and White never fails in the essential quality of good scale, nor their presentation studies to convey it clearly. The design for the McKinley Birthplace Memorial is shown by a drawing of a fine line technique (Figures 34 and 35) which contributes to the general excellence of the design and its presentation. It is very carefully and firmly drawn, even the entases of the columns being shown.

Two shades of ink are used, one much diluted, the other nearly full black, and the lines are varied in width as needed to define the relative importance of the parts of the design. A strong black outline separates the building from the background. The principal vertical breaks, outlines of capitals, and the right side of the columns in the peristyle are also shown by full black (or nearly so) but finer, lines. A half strength black line is used to outline the engaged columns and the lower shadow-casting line of the entablature. The wash rendering is very simple, but sufficient. The conventions of representing the statue and distant wall, seen through the peristyle are managed without difficulty, though unusually light in value for the amount of aerial perspective to be expected in the distance to them from the peristyle as indicated on the plan (Figure 36). The background is put in with an air-brush, and a slight amount of fine stippling, or "speckling," with an atomizer, appears at either side of the building. The mere suggestion of trees is made with a brush. A few tiny points in the flowers in the vases, and the tree at the right, also a fine line along the top of the hedge have been touched in with Chinese white. The general effectiveness of the presentation is enhanced by the treatment of the foreground, the sidewalk and roadway being indicated by a couple of horizontal lines and a wash of "dirty-water," and a flat band of darker shade placed between the roadway and the wide title band at the bottom. The free-hand drawing of the lettering of the title adds a pleasing touch to the general attractiveness of this drawing. The same characteristics and conventions of drawing are used in the plan as in the elevation though drawn by a different draftsman, and both drawings are excellent models of presentation for competition or record drawings —clear, correct and informative.

It was intended here to use Mr. Goodhue's detail of the Nebraska Capitol Competition design to illustrate other points of technique in relation to scale; but instead of the drawing requested Mr. Goodhue sent photographs of other drawings which were not familiar to the writer, one of which (Figure 37) illustrates some of the things, particularly relating to scale, which the study of technique tends to avoid. For example the foreground walks are in a much smaller scale than the monument—and in the photograph from which our illustration is reproduced, they fail to take their place as a base to the structure and appear rather like a fence, over which one seems to see tree-tops and the upper part of a church-tower-like structure. We do not realize immediately the big scale of the monument. The stone-work in the foreground, or retaining walls, seems so small in scale as to suggest terra-cotta blocks, for the impression, given by the comparatively coarse line-work of the stone-jointing in the tower and the sizes of the stones, is that of a drawing at the scale of one-eighth of an inch to the foot, while the actual scale is one-sixteenth of an inch. One has to measure the parts in order to determine their sizes; because, immediately one attempts to compare the figures on the foreground steps with the various scales of sculpture one realizes that no consistent relation exists between them. The human figures measure from four to five feet in height, but until that is discovered it is not clear whether the opening at the base, which is 3 feet by 5 feet, is intended as a doorway, or not. The strange exaggeration of scale is apparently partly a matter of technique. The stones in the retaining walls are not so small as they seem by comparison with those in the tower; nor are the stones at the base of the tower as huge as they seem to be

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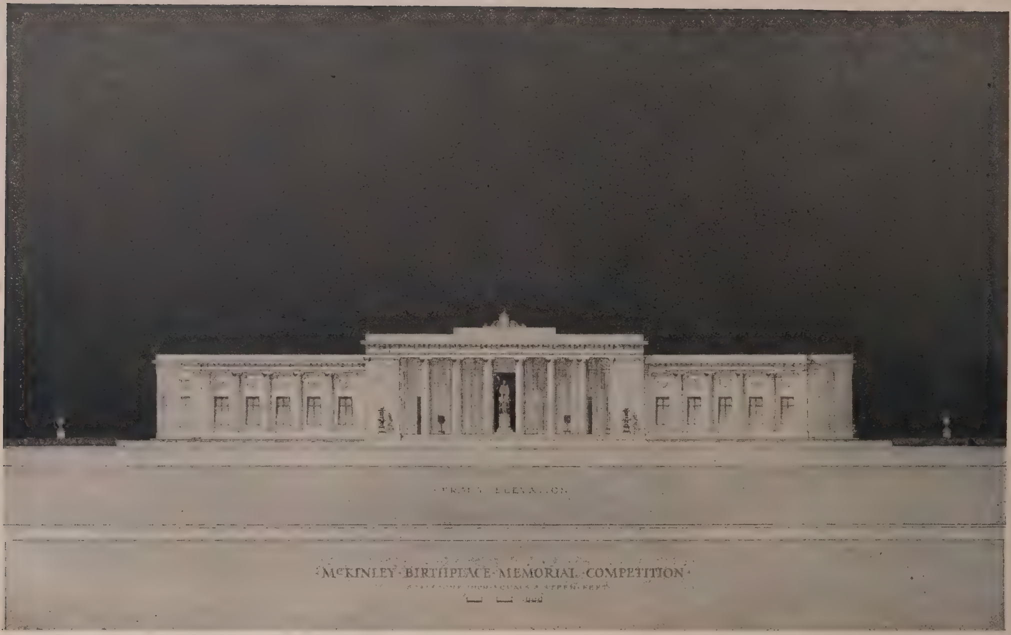


Figure 34. Design for McKinley Birthplace Memorial Competition, McKim, Mead and White, Architects. Drawn and Rendered by Gerald Holmes.

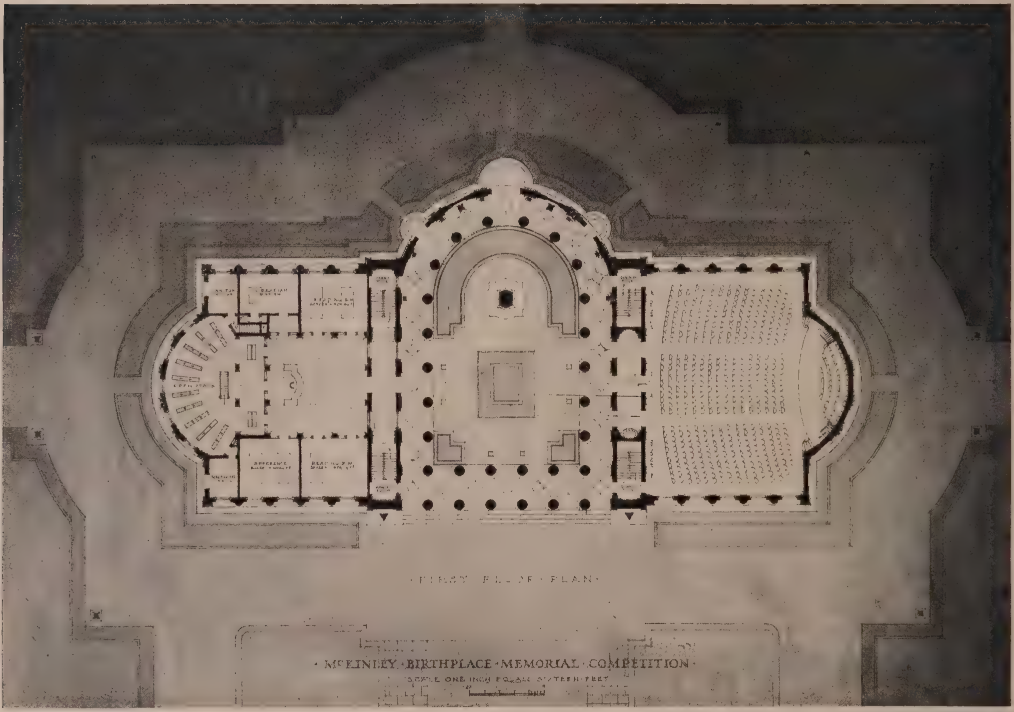

FIRST FLOOR PLAN
McKINLEY · BIRTHPLACE · MEMORIAL · COMPETITION
SCALE ONE INCH EQUALS SIXTEEN FEET

Figure 36. Design for McKinley Birthplace Memorial Competition, McKim, Mead and White, Architects. Drawn and Rendered by John Thompson.

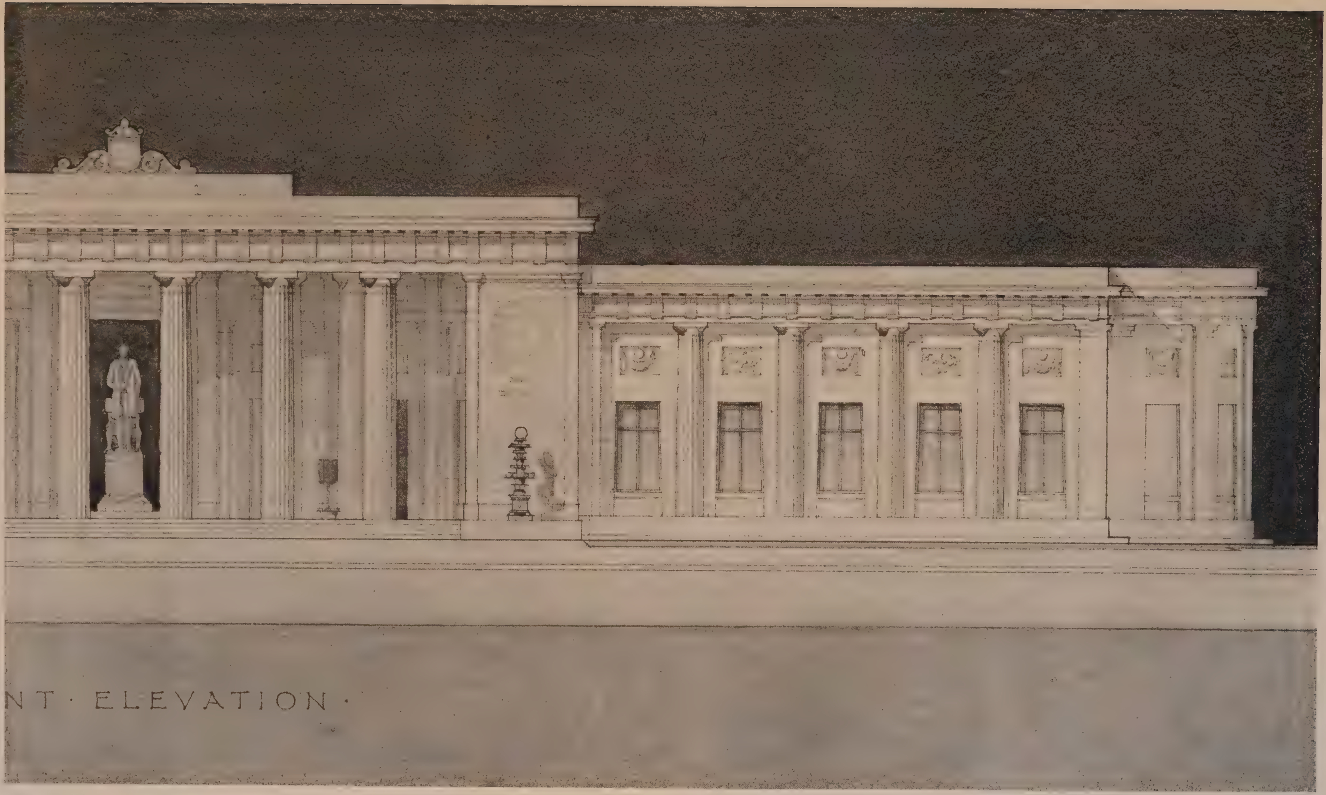


Figure 35. Design for McKinley Birthplace Memorial Competition, McKim, Mead and White, Architects. Detail of the drawing shown in Figure 34, at the actual size of the original drawing. Scale $\frac{1}{16}$ in.=1 foot. Drawn and Rendered by Gerald Holmes.

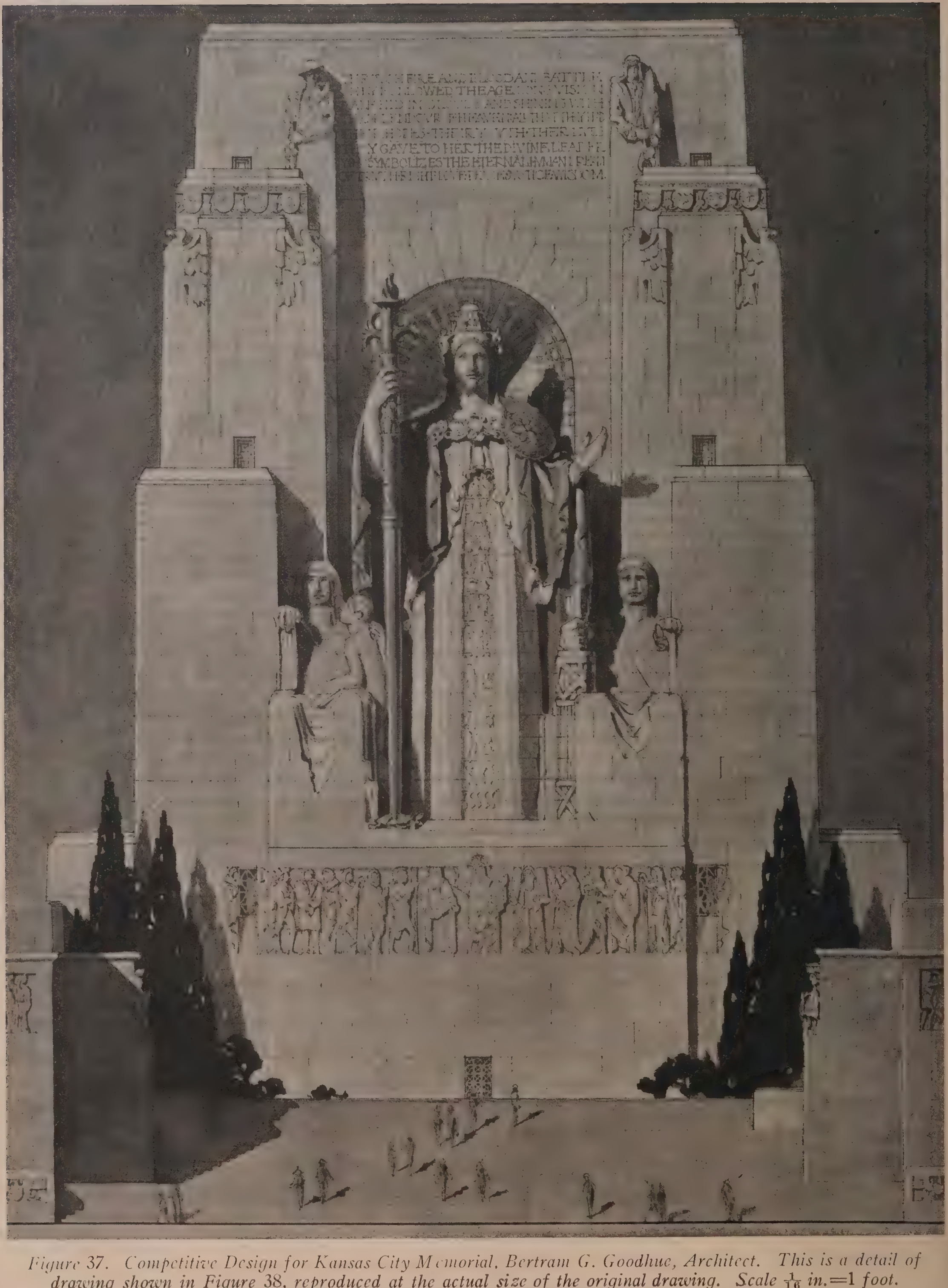


Figure 37. Competitive Design for Kansas City Memorial, Bertram G. Goodhue, Architect. This is a detail of drawing shown in Figure 38, reproduced at the actual size of the original drawing. Scale $\frac{1}{16}$ in.=1 foot.

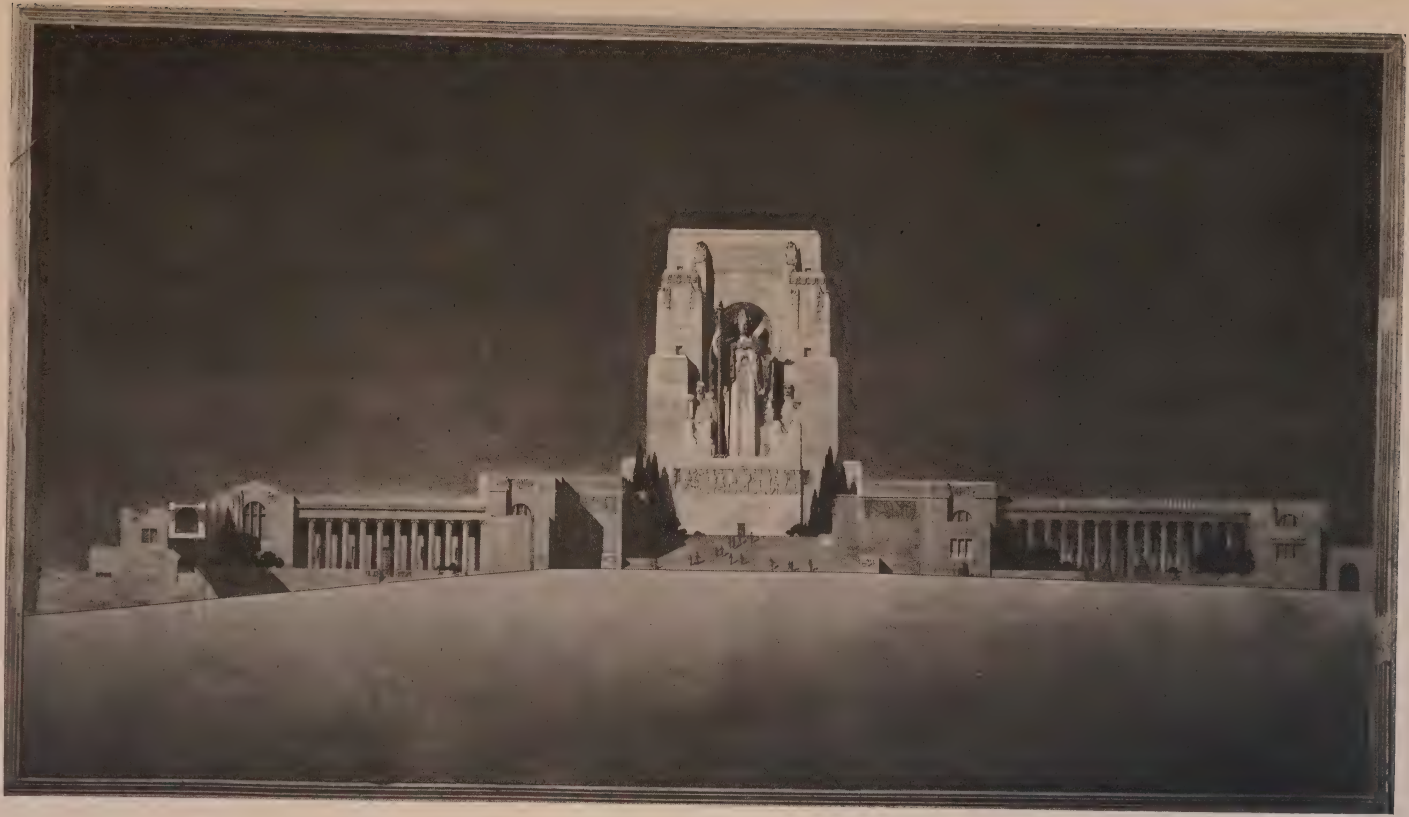


Figure 38. Main Elevation, Competitive Design for Kansas City Memorial, Bertram G. Goodhue, Architect.

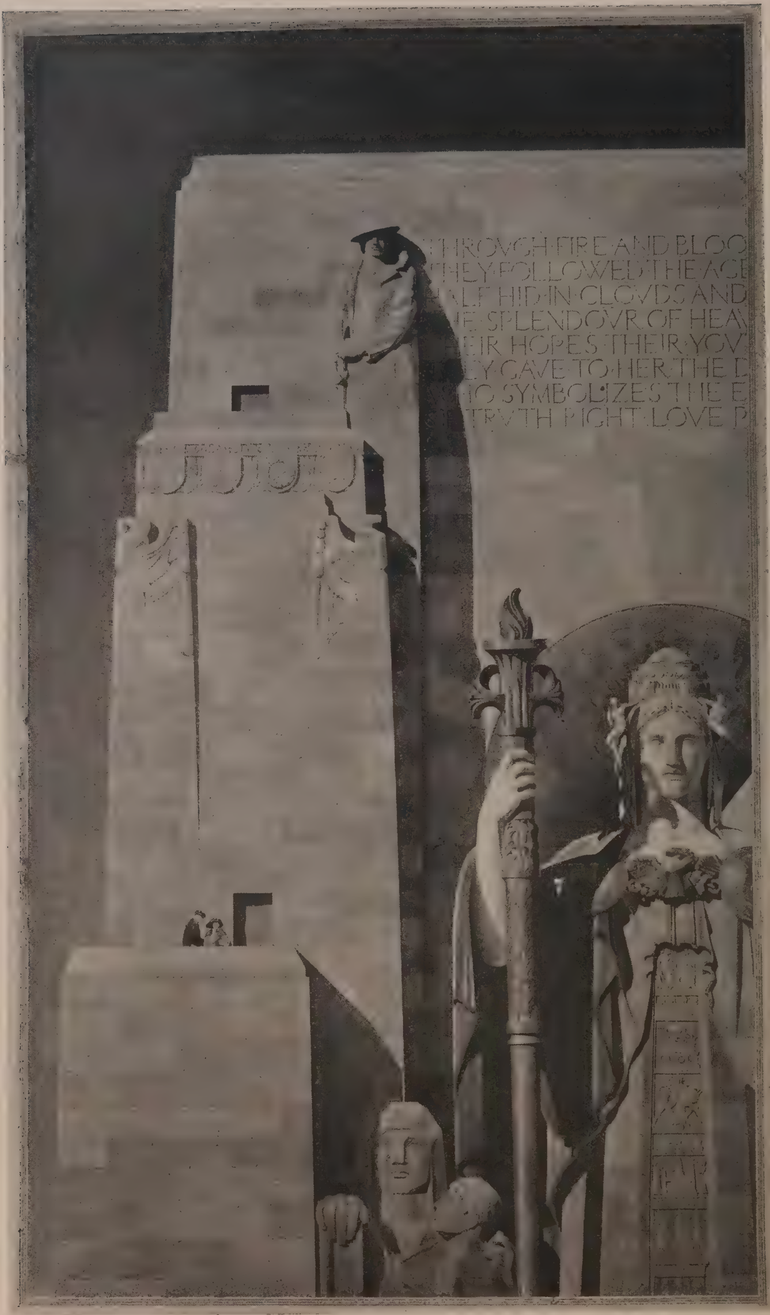


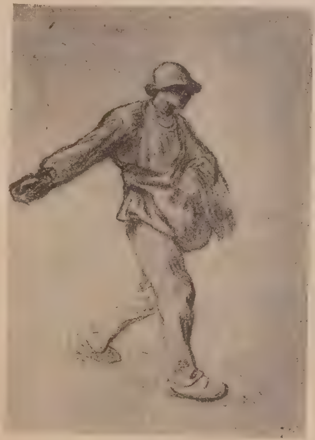
Figure 39. Detail of Competitive Design for Kansas City Memorial, Bertram G. Goodhue, Architect.

ESSENTIALS OF LIFE DRAWING

BY FRANK VINCENT DU MOND

This is the first installment of an article in which Frank Vincent Du Mond, the well-known painter and mural painter and instructor at the Art Students League, New York, discusses matters of vital interest to all students of life drawing. Mr. Du Mond does not attempt in the course of an article to teach life drawing; that must be done by the student's own instructor in class. Mr. Du Mond's article conveys a strong message and stimulates thought.—ED.

LIFE drawing is exactly what its name implies, the drawing of life. It is not "drawing from life." It is not, in the broadest sense, merely drawing from the human figure. One may make a life drawing of a tree. The point I wish to make clear at the outset is that in life drawing the prime essential is to draw the life of the subject, the character, personality, action. There is nothing more lifeless than the type of so-called life drawing too generally accepted in art schools. I had thought to present here reproductions of a few of these school drawings, for the making of which the students had received commendation from the authorities of the art school and, in some cases, prizes. But I decided to spare the reader and to forbear defacing the pages of this magazine. Such drawings as I should have been compelled to use to illustrate my point are ugly and repellant to everyone who is not blinded by what I call the art-student preoccupation with the minuitae of drawing from the model.



Pencil Study by J. F. Millet

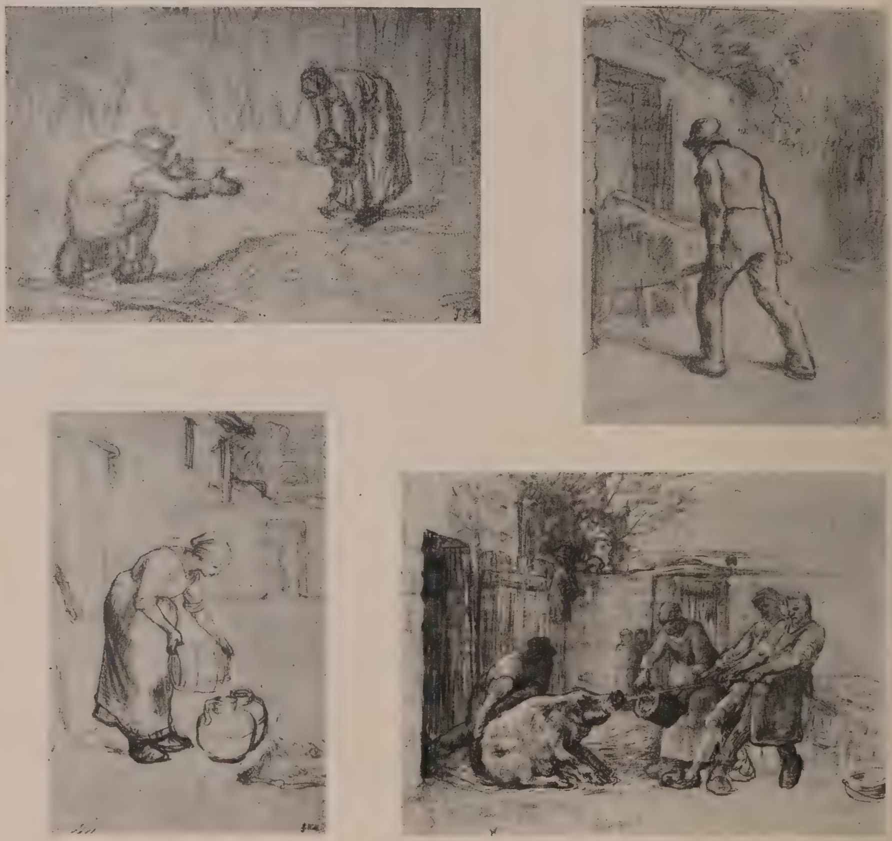
Instead of placing the model in a lifeless and meaningless art school pose it is important to have the model *doing something*. Give him a base ball bat and let him imagine himself striking a pitched ball. Give him a rapier and tell him to thrust. Put two sticks into his hands and tell him that they are the handles of a wheelbarrow he is to push. If a man wants to knock down an apple that hangs so high on a tree that is beyond his reach he is likely to find a pole to knock that apple down with. Just as soon as he takes the pole into his hands and reaches for the apple, his whole person is co-ordinated for the accomplishment of his purpose and the pole becomes, in a peculiar sense, a part of himself for his thought includes it as an extension of himself for this special purpose. A model instructed to knock down an imaginary apple is a much better subject to draw than the same model standing in a prescribed art school attitude of which he does not know the meaning, for the good reason that it probably has none.

If I instruct the model in the presence of the class to knock down an imaginary apple, let us say, and talk to the class about what the model is to do, I am centering their attention as well as that of the model on the action described, I am binding them all together with a unity of interest. Understanding the model's purpose and entering into his thought, they will be in a condition of mind favorable to the expressive representation of the figure in this action.

Now, I do not wish to be understood as advocating the drawing of figures in more or less violent action only. Everyone is doing something all the time as long as he lives,; he is doing something when he is sleeping. Though a sleeping person or a person resting is very quiet he is breathing and moving slightly; there is life and a certain degree of action. The lines of a figure in violent action are, in general, angular; there is something of the character of the conventional representation of a lightning stroke, while the lines of a person resting are, in general, smooth curves, flowing gently into one another. Between these extremes lie innumerable degrees of action that have their correspondingly various expressions in line. The point I wish to bring out is that one should perceive and draw *life* whether the subject be in violent action or quiescent.

Among the best examples I know of the drawing of action are the sketches of J. F. Millet made as studies for his paintings. They show a remarkable insight into the psychology of the subject in every instance and a remarkable ability to express, by means of the pencil, that which he perceived. A number of these studies are reproduced at small size in connection with this article. Though they are not life drawings in the generally accepted sense, they reveal clearly J. F. Millet's mastery of the art of drawing figures.

Note the swing of the arm of the sower, the stride, the whole motion of the figure. Note also how the man pushing the wheelbarrow is throwing his weight forward against the load and how his arms hang straight and taut as the means by which a portion of the weight of the load is suspended from his shoulders. In the sketch of the man, woman and child, note the expressiveness of the gesture of the man, the brooding care expressed in the lines of the woman's figure, and the animation and joy in that of the child. In the group of which the centre of interest is a hog, note how the animal is throwing his weight on the ground to make himself as nearly immovable as may be, while the men have their feet



Pencil Studies by J. F. Millet.

firmly planted and their weight thrown in the opposite direction. Of this matter of a foot-hold I wish to say more later. Foot-hold is the key to all movement on the part of animals, including man. It deserves special attention on the part of the artist and student. In the study of a woman pouring milk into a jar we have an example of relatively quiet action and we find that the artist has perceived her mental concentration on the task and expressed it. I wish to say in passing that J. F. Millet used a model only for checking up such studies after he had drawn his first conception.

Still less active is the figure shown in the drawing of the late Kenyon Cox, reproduced herewith. Though sitting quietly, this figure is evidently alive and interested in some object upon which the eyes are fixed. It is an excellent illustration of what I said a moment ago about curves that flow gracefully one into another in a figure that is not in violent action. This drawing also shows certain decorative qualities due to the fact that it was made as a study for a mural painting. Of that, more later. Mr. Cox's study for the drapery of this figure is shown here to make evident the fact that the character and the action of the figure find expression in the lines of its drapery or clothing.

I have dwelt at some length upon the importance of sensing the *life* of the subject because I regard it as the prime essential in life drawing and the thing that is most important for the student to grasp. There is too much *negative* study, too much effort to *avoid* mistakes and too little of the *positive* about the way most students approach the subject of life drawing. They spend years learning what *not* to do, instead of developing *insight*.

It is not the fault of the student, but of the standards of judgment adhered to for many years, which give honors too often to the careful, plodding but unseeing person who copies the model with meticulous care. A mastery of technique is essential to the finished artist, proportion, anatomy, and all the rest of it are necessary, but only to reinforce and make facile and effective his expression of what his *insight* reveals.

In this connection it is interesting to read the passage from Ralph Waldo Emerson's "The Conduct of Life" which is quoted below from his discussion of the subject of "Behavior":

"The soul which animates Nature is not less significantly published in the figure, movement and gesture of animated bodies, than in the last vehicle of articulate speech. This silent and subtile language is Manners; not *what* but *how*. Life expresses. A statue has no tongue, and needs none. Good tableaux do not need declamation. Nature tells every secret once. Yes, but in man she tells it all the time, by form, attitude, gesture, mien, face, and parts of the face, and by the whole action of the machine. The visible carriage or action of the individual, as resulting from his organization and his will combined, we call manners. What are they but thought entering the hands and feet, controlling the movements of the body, the speech and behavior?"

(*To Be Continued*)

ARCHITECTURAL EDUCATION

AN IMPORTANT work about which most students and many members of the architectural profession know too little is being carried on by the Association of Collegiate Schools of Architecture composed of representatives of the architectural faculties of seventeen schools of architecture including most of the great universities and technical schools that have departments of architecture.

Among the subjects of moment relating to architectural education to which the Association is giving thoughtful study is the question of the five year course in architecture as the accepted standard in stead of the four year course now found in most schools of architecture. The preponderance of opinion, as shown by answers to questionnaire sent out to those schools which, in the opinion of the Committee and to its best knowledge, did not offer as yet a course exceeding four years of study, was in favor of a five year course. Thirty-two schools expressed their opinion, only three not replying. This revealed the fact that besides the four schools which were already known to offer a course of at least five years' duration, five more were to be added as having definitely adopted it.

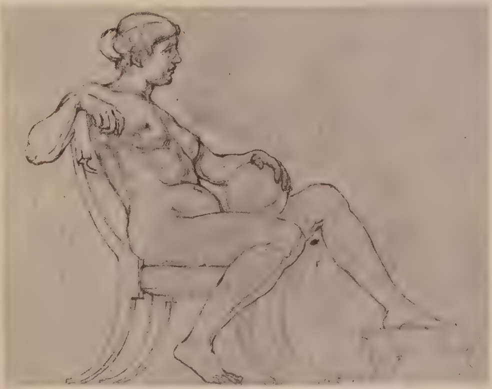
To the question "Are you satisfied with the four year course as generally established in all the schools?" twenty-five, or the almost unanimity of answers received were negative.

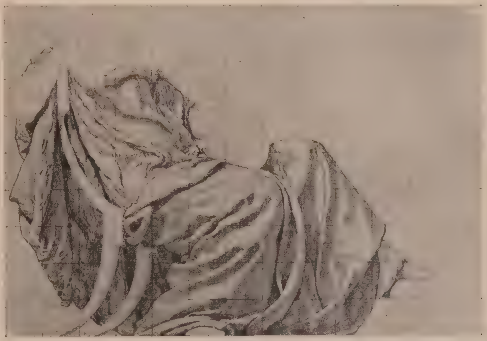
To the question "Do you favor a five year course?" twenty schools unreservedly approved it and only three schools took a definite stand against it.

In short, it would seem from the results of this inquiry that the principle of the five year course, and in certain instances, of even a longer period, has been widely indorsed by schools of architecture and that it is only a question of time before it will be established, and almost without exception, throughout the country. Most schools have felt the need and a few have taken the lead.

Another question which is being studied by the Association is, "Should the schools in older centres of population be post-graduate schools for the graduates of those schools located in isolated sections or newer centres of the country?"

THE Boston Architectural Club has published a remarkable book covering the Tudor Period of English Domestic Architecture, with Measured Drawings and Details, copies on sale at Five Dollars ($5.00) per copy net f. o. b. BOSTON. Orders should be sent in at once as the edition is selling out rapidly. Checks should be made payable to Fred. V. Little, Executive Secretary, No. 16 Somerset St., Boston, Mass.





Pencil Studies of Figure and of Drapery by Kenyon Cox.

PENCIL POINTS

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COMPETITIONS FOR PRIZES OF ROME ANNOUNCED

THE American Academy in Rome has announced its annual competitions for its Fellowships in architecture, sculpture, painting, musical composition, and classical studies. The stipend of each Fellowship in the fine arts is $1,000 a year for three years. In classical studies there is a Fellowship for one year with stipend of $1,000, and a Fellowship paying $1,000 a year for two years. All Fellows have opportunity for travel, and Fellows in musical composition, from whom an extra amount of travel is required in visiting the leading musical centers in Europe during six months of each year, receive an additional allowance not to exceed $1,000 a year for traveling expenses. In the case of all Fellowships residence and studio (or study) are provided free of charge at the Academy.

The awards of the Fellowships will be made after competitions, which in the case of the fine arts are open to unmarried men who are citizens of the United States; in classical studies, to unmarried citizens, men or women. Particular attention is called to the fact that in painting and sculpture there will be no formal competition involving the execution of work on prescribed subjects, as formerly, but these Fellowships will be awarded by direct selection after a thorough investigation of the artistic ability and personal qualifications of the candidates. Applicants are accordingly requested to submit examples of their work and such other evidence as may assist the jury in making the selections.

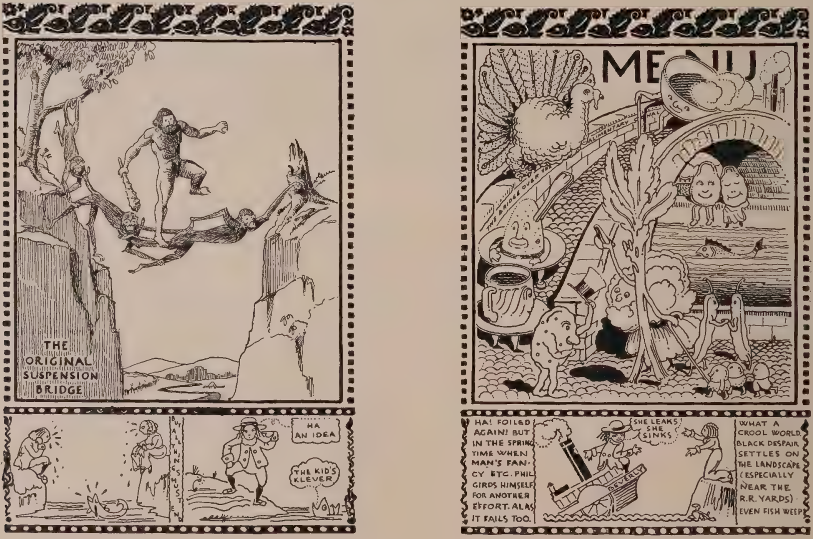
Entries will be received until March first. Circular of information and application blank may be obtained from Roscoe Guernsey, Executive Secretary, American Academy in Rome, 101 Park Avenue, New York City.

PITTSBURGH ARCHITECTURAL CLUB

THE Pittsburgh Architectural Club is now preparing for its 14th annual exhibition to be held in the Galleries of the Carnegie Institute, Pittsburgh, from February 6th to February 22nd inclusive. The General Exhibition Committee is comprised of the following: Oliver J. Robling, Chairman, Kenneth R. Crumpton, R. Alex. Willson, Leo. A. McMullen, W. B. Chalfant, William H. Harrold, E. H. Steffler. Committee on Hanging is comprised of the following: Douglas D. Ellington, Chairman, Edward B. Lee, Howard K. Jones, Thomas Pringle, Stanley L. Roush, Ernest W. Boyer, Henry Hunt.

The Club is again publishing their monthly mouthpiece, the "Charrette"—Mr. Thomas Pringle taking over the editorship for the ensuing year.

The next regular monthly meeting will be called to order in the Chamber of Commerce Building, the evening of the 24th inst.


THE ORIGINAL SUSPENSION BRIDGE
BUT ALL THINGS MUST END
HA AN IDEA
THE KID'S KLEVER
ME U
HA! FOILED AGAIN! BUT IN THE SPRING TIME WHEN MAN'S FANCY ETC. PHIL GIRDS HIMSELF FOR ANOTHER EFFORT. ALAS IT FAILS TOO.
SHE LEAKS SHE SINKS
BEVERLY
WHAT A CROOL WORLD. BLACK DESPAIR SETTLES ON THE LANDSCAPE (ESPECIALLY NEAR THE R.R. YARDS) EVEN FISH WEEP

Designs for Pages of Second Annual Staff Dinner of the Delaware River Bridge Commission. The Design at the left is by Roy Larson and the one at the right is by John F. Harbeson.

GERALD K. GEERLINGS

GERALD K. GEERLINGS, winner of the Henry Gillette Woodman Prize for 1923 was born in Milwaukee, Wis., studying there under professors of the Chicago Art Institute before the war. During the war he served with the "75" Artillery of the 32nd Division overseas. After the armistice he attended Cambridge University, England, studying principally archaeology, history of the fine arts and English architecture. Upon returning to the United States he completed the work for his bachelor's and master's degrees in architecture at the University of Pennsylvania. During his last one and a half years at the University Mr. Geerlings held an assistantship in architectural design under Prof. Paul P. Cret. For the year 1921-22 he was awarded the "Prix d'Emulation of the Société des Architects Diplomés par le Gouvernement Français." For the past two years Mr. Geerlings has been with York and Sawyer. He plans to sail this coming September.

THE ARCHITECTURAL CLUB OF THE UNIVERSITY OF TORONTO

THE first social event of the season of The Architectural Club of the University of Toronto, Canada, was a dinner for the club members at which Professor E. R. Arthur, the latest addition to the staff in architecture, gave a very interesting talk on student life in England. He outlined some of the architectural work being carried on by the larger universities there, especially by the University of Liverpool, of which he is a graduate. Mr. J. M. Lyall, one of the leading Toronto architects, who has always taken a great deal of interest in our club, discussed the general architectural situation and the outlook for the student, in an authoratative manner. Later, Professor A. W. McConnell, who has recently returned from Europe, spoke on the work of the department and what it aims to accomplish this term. Professor H. H. Madill was not present on this occasion, owing to his recent departure on leave of absence for England, France and Italy. The dinner is but one of several social gatherings that the club has scheduled for the present year.

In the studio the club is showing great enthusiasm, and everything points to a very successful display of work at the annual exhibition held in Hart House each spring.

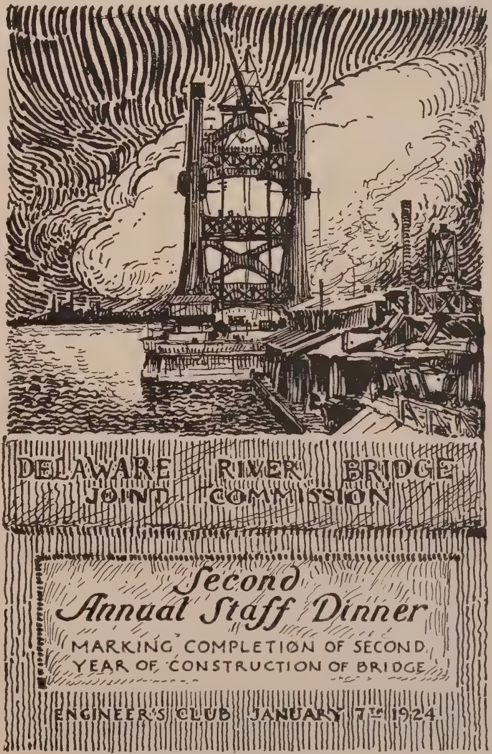
The outdoor sketch classes, inaugurated in the fall term by Professor C. H. C. Wright, and conducted by Professor C. W. Jefferys, have been discontinued, owing to the cold weather, but for many weeks were a feature productive of much pleasure and profit for all who attended. The undoubted value of the experience gained in the water color rendering of natural objects has determined Professor Wright to incorporate these classes in the regular fall programme.

The spring term is being entered by the students with considerable enthusiasm, and the club executives expect to have a very favorable report after the annual exhibition.

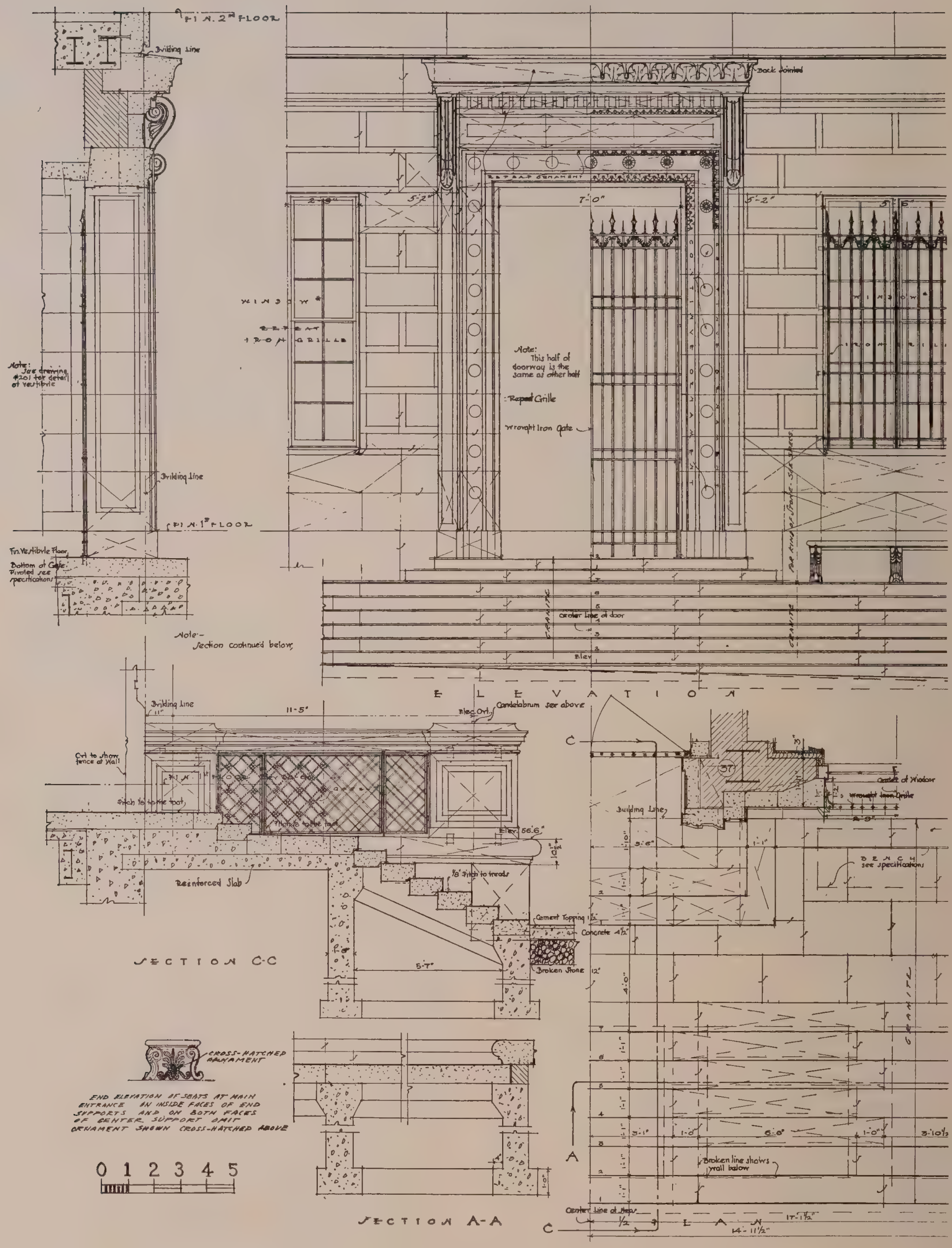
TAU SIGMA DELTA HONORARY FRATERNITY IN ARCHITECTURE AND THE ALLIED ARTS

THE election and acceptance of the new Grand Chapter of Tau Sigma Delta Honorary Fraternity is announced. The election took place in Detroit, Michigan, October 5, 1923, when the National Convention convened. The new officers are Professor George Fraser, Cornell University, Ithica, N. Y., as Grand Master; Professor Wilbur Ronan, Ohio State University, Columbus, Ohio, as Grand Recorder; Mr. John E. Somppi, 608 Temple Building, Detroit, Michigan, as Grand Scribe.

The first meeting of the Grand Chapter will take place the first week in February at Detroit, Michigan. Any information relative to the organization, its administration, or its expansion may be directed to any one of these officers.


DELAWARE RIVER BRIDGE
JOINT COMMISSION
Second
Annual Staff Dinner
MARKING COMPLETION OF SECOND
YEAR OF CONSTRUCTION OF BRIDGE
ENGINEER'S CLUB JANUARY 7th 1924

Cover Design by Paul Cret for Dinner Program of Delaware River Bridge Commission



Details of Construction—United States Treasury Annex, Washington, D. C.
Cass Gilbert, Architect.

DRAWING IN PENCIL

(*Continued from Page* 36)

work I find it is best to begin in one of the upper corners and work down without construction lines if I can get away with it.

Erasures are almost inevitable, but they should be made and repaired with as much care as possible. It will be found convenient to use two grades—the familiar red and the kneeded rubber. The usefulness of the latter in the drawing where there are delicates nuances to be handled is vrey great, since it will lighten a tone or line without destroying the texture; but it may be abused, and there is a constant temptaion to continue retouching until the drawing is spoiled.

I have often been asked how long I spend over a drawing. I usually put in the best part of two mornings or two afternoons on a seven by nine inch architectural subject, and several hours, first and last, on the retouching. A nine by twelve drawing, the other size I use, takes me about double the time. This is very slow work, but my object has been study, and there is no pleasanter way to spend hours at a stretch studying a venerable building than in making a thoughtful drawing of it.

THE TECHNIQUE OF RENDERING

(*Continued from Page* 45)

when compared at a glance with the foreground figures. An almost invisible joint line, made with a very hard and sharp pencil would have helped the observer to gain some idea of the intended sizes of the stones—which are shown of sizes and proportions unusual in modern work, some of the stones measure 2½′ x 14′, others 5′ x 11′ on the face. The most interesting bit of technique is the head of the large statue and the niche-head behind it, which are beautifully drawn. The best effort to give a sense of the true scale of the design is in the size and indication of the two figures appearing against the attic story. Nothing that I could discover in the photographs of the drawing gives so much as a hint that the principal figure would be sixty-two feet high—which is its actual measurement. Upon seeing the original drawing (Figure 38 for the whole effect) many of the deficiencies of the photographic reproduction became apparent. The drawing is completely inked in with a very fine line of about the same weight throughout and dependence placed on the wash rendering for all effect of modelling and distances. The washes are unusually heavy but handled with great skill. Their density, however, causes the line work in the foreground walls to partially disappear, while on the much lighter walls of the monument they hold their full strength, causing the peculiar illusion mentioned above. Seen in the original, the technical objections are not so very apparent. One would say of the actual drawing that it is not far short of a masterpiece. Of the magnificent detail drawing one may state masterly without reservation. The original of the detail (Figure 39) is nearly six feet high.

PERSONALS

W. Holmes Crosby, Architect, has removed his offices to Room 414 Deach Building, Oil City, Pa.

George Herbert Gray and Clark J. Lawrence have formed a partnership under the name of Gray and Lawrence for the practice of architecture and community planning with offices at 42 Church Street, New Haven, Conn.

Hines & Fisher, Architects, 295 Central Building, Hagerstown, Md., have dissolved partnership and discontinued the practice of architecture.

Ralph E. Griswold will be associated with A. D. Taylor, Landscape Architect, 4614 Prospect Avenue, Cleveland, Ohio.

Morris W. Maloney, Architect, has removed his offices to 23 Pearl Street, Springfield, Mass.

Hoener, Baum and Froese, Architects and Engineers, have removed their offices to Grand Laclede Bldg., St. Louis, Mo.

John Graham, Architect, has removed his offices to 1351-1362 Dexter Horton Building Seattle, Wash.

Delos H. Smith, Architect, has removed his office to 1707 I Street, Washington, D. C.

George Bain Cummings and Fred Leonard Starbuck have formed a partnership under the firm name of Cummings and Starbuck, Architect. The firm will continue the practice of architecture with offices at 520 Security Mutual Buiding, Binghamton, N. Y.

Thomas & Allen, Architects, have removed their offices to The Swope Block, Room 39, Terre Haute, Ind.

W. E. Lescaze has opened a department of decoration in connection with his architectural office, The Lescard Shop, 24 West 8th Street, New York.

Edwin H. Lundie, Architect, has removed his offices to 649 Endicott Building, St. Paul, Minn.

Carl E. Macomber, Architect, has removed his offices to the Board of Commerce Building, Saginaw, Mich.

Clarence E. Wunder, Architect and Engineer, has removed his offices to 1520 Locust Street, Philadelphia, Pa.

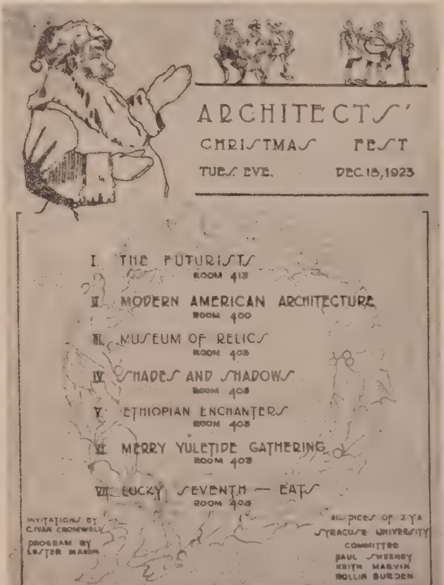
Harley G. Corwin, Architect, has opened offices at 129 West Washington Street, Los Angeles, Cal. The firm of Corwin & Merrill has been dissolved.

Klingensmith, Rice, Wilkens have formed a partnership and removed their offices to 1503 Arcade Building, St. Louis, Mo.

Ellsworth V. Holden, William R. Ferris and Asa B. Cross Barnes have formed a partnership for the practice of architecture under the firm name of Holden, Ferris & Barnes, with offices at 1016 Baltimore Avenue, Kansas City, Mo.

David Podoloff, Architect, has removed his offices to 116 East 57th Street, New York.

Alexander B. Trowbridge, Architectural Adviser, has opened offices in the Bowery Savings Bank, 110 East 42nd Street where his practice will be limited to consultation service.



ARCHITECTS'
CHRISTMAS FEST
TUES. EVE. DEC. 18, 1923

I. THE FUTURISTS
ROOM 413

II. MODERN AMERICAN ARCHITECTURE
ROOM 400

III. MUSEUM OF RELICS
ROOM 403

IV. SHADES AND SHADOWS
ROOM 403

V. ETHIOPIAN ENCHANTERS
ROOM 403

VI. MERRY YULETIDE GATHERING
ROOM 403

VII. LUCKY SEVENTH — EATS
ROOM 405

INVITATIONS BY
CIVAN CROMWELL
PROGRAM BY
LESTER MAXON

AUSPICES OF ΣΥΑ
SYRACUSE UNIVERSITY
COMMITTEE
PAUL SWEENEY
KEITH MARVIN
ROLLIN BURDEN

Design for Announcement of Architects' Christmas Fest, Syracuse University.

FREE EMPLOYMENT SERVICE FOR READERS OF PENCIL POINTS

(*Other Items on Page 76*)

Draftsman for Terra Cotta Plant Wanted: Plant experience desirable but not absolutely necessary. Men with sufficient experience in stone work or with architects may qualify. Continuous employment, with good working conditions at good pay in plant near New York City. Write giving details of experience. Address Terra Cotta, care of Pencil Points.

Architectural Draftsman, junior, attended University in Europe. Six months office experience in this country, desires position. Salary no object. References cheerfully furnished. Leopold Halperin, 110 Avenue C., Brooklyn, N. Y.

Position Wanted: Junior draftsman, good tracer, detailer on small scale, wishes position in architect's office where he can develop. Harry Gillers, 451 Claremont Parkway, Bronx.

Structural Steelwork Draftsman, 5 years' experience, wishes position. John Patrick, care of Paxton, 149 Richards St., Brooklyn, N. Y.

Positions Wanted by two draftsmen with four and eight years' experience on general work. Fred S. Adinolfi, 922 Elsmere Place, Bronx, N. Y. C.

Graduate of U. S. Military Academy desires employment that will require out door work, such as superintendent of construction. Experienced in reinforced concrete work, plans and specifications, F. L. V., care of Pencil Points.

Draftsman Wanted for detailing and billing on high grade veneered doors and trim. Permanent position for right man. Location Southwestern Michigan. C. & P., care of Pencil Points.

General All Around Draftsman, graduate of University of Pennsylvania, desires position. H. A. B., care of Pencil Points.

Architectural Draftsman, Cooper Union and Beaux Arts Institute schooling, three years' experience on small houses, tenements and office buildings, desires position. Address Randolph, care of Pencil Points.

Senior Architectural Draftsman, 14 years experience, having held several responsible positions as chief draftsman, desires position in New York City. Salary $65 per week. Best references. Address Senior, care of Pencil Points.

Young Man would like position in architect's office. Two years' experience. One year at Columbia University and now attending course in architecture. Good at tracing, lettering and modelling. Address Junior, care of Pencil Points.

Position Wanted: Young woman draftsman, Columbia University Extension student with three years' general architectural experience. Capable of producing preliminary sketches, working drawings and details. New York City or vicinity only. IKA, care of Pencil Points.

Young Man seeks position, afternoons preferably, where work will bring him out of doors. C. C., care of Pencil Points.

Architect and Engineer desires connection with small office with view of partnership. Extensive training, experience, thorough on construction, reliable. Age 30 years. Cleveland or vicinity preferred. Box No. 1870, care of Pencil Points.

Wanted: Experienced marble draftsman. Write Candoro Marble Co., Knoxville, Tenn.

Junior Draftsman, 2 years' school experience and 8 months in building. 3963, care of Pencil Points.

Junior Draftsman, two years' experience, two family residences and country homes, some experience in supervision of work on the field, desires position. Joseph A. Igler, 526 East 81st St., New York City.

Junior Draftsman, experienced in interior architectural drawing desires position with New York architect. Experienced in tracing, lettering and rendering. Jeannette Knowles, 39 West 93rd St., New York City, Riverside 7425.

Arthur L. Guptill

ARTHUR L. GUPTILL TO TEACH SKETCHING ON EUROPEAN TOUR

ARTHUR L. GUPTILL, author of "Sketching and Rendering in Pencil" has just completed arrangements which will make it possible for those desiring to sketch under his instruction while taking a sight-seeing tour of Europe next summer to enjoy the double advantage of visiting many of the finest and most interesting examples of architecture and profiting by Mr. Guptill's skill in the teaching of pencil drawing.

The tour will sail from New York and Montreal in June and reach this side on the return trip early in September. The tour will be managed by a well-organized tourist agency, giving those who join the benefit of special facilities for comfort and economy.

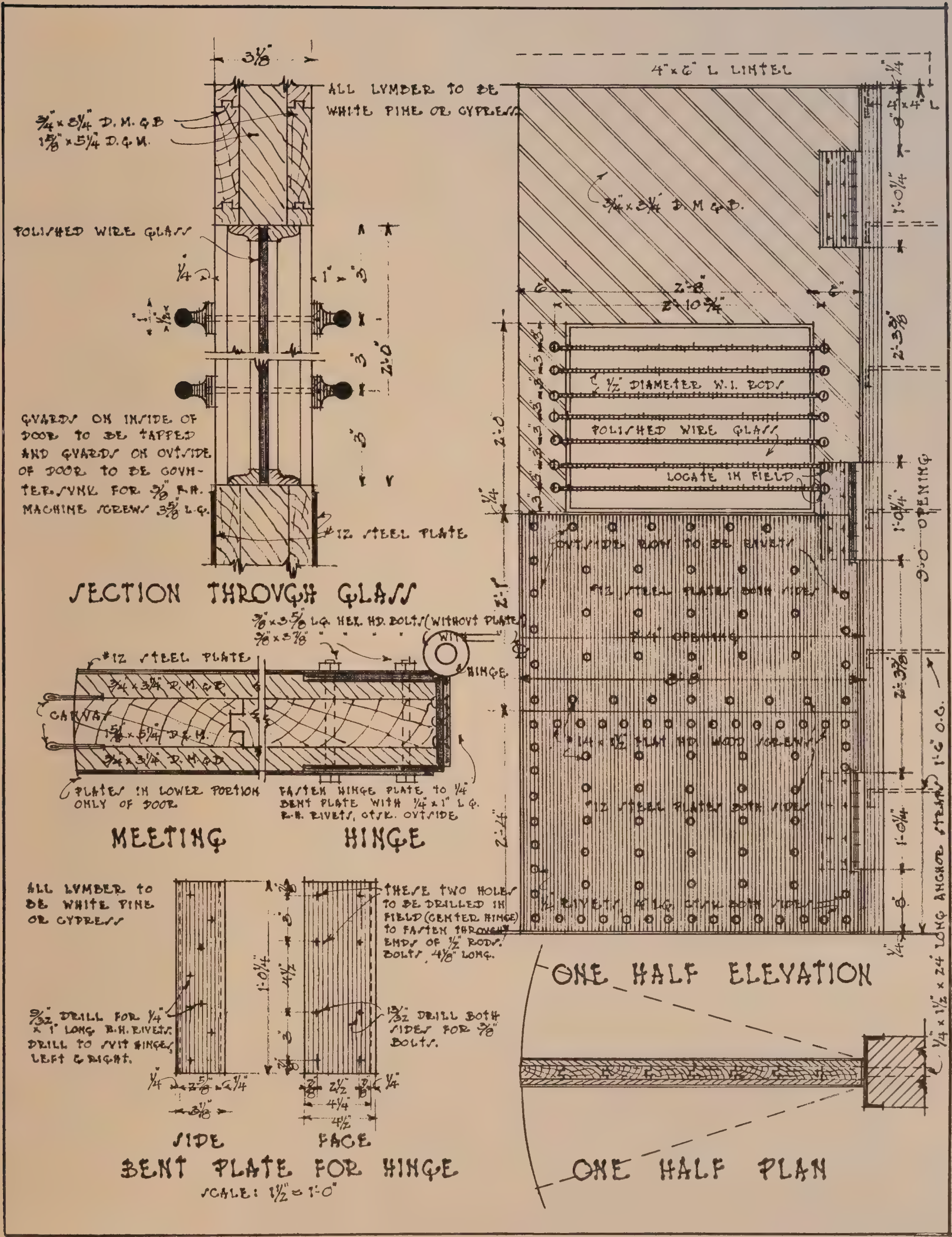
Other instructors on this tour will be Pedro J. Lemos, Director of the Museum of Fine Arts, Stanford University, Editor in Chief of School Arts Magazine and Albert E. Bailey, Professor of Religious Art in Boston University. The director of the tour will be Henry Turner Bailey, Director of the Cleveland School of Art. Mr. Bailey has a national reputation as an interpreter of art and as an inspirational lecturer.

Mr. Guptill is an instructor at Pratt Institute, an architect and a member of the firm of Bearse & Guptill, architectural illustrators, New York City.

The party will visit France, Switzerland, Italy, Holland and England. Full information about the tour can be had by writing to Mr. Guptill, 182 Emerson Pl., Brooklyn, N. Y.

REIMS, NOT ROUEN

AS MANY readers of Pencil Points have probably noticed, the detail of Reims Cathedral published on Plate I in the January issue was labeled Rouen. Correct reference to this plate was made on the cover of the January issue.


3⅛"
ALL LUMBER TO BE WHITE PINE OR CYPRESS
¾" × 3¼" D. M. & B.
1⅝" × 5¼" D. & M.
POLISHED WIRE GLASS
¼"
1" ± 3
A
3"
2'-0"
GUARDS ON INSIDE OF DOOR TO BE TAPPED AND GUARDS ON OUTSIDE OF DOOR TO BE COUNTERSUNK FOR ⅜" R.H. MACHINE SCREWS 3⅝" LG.
#12 STEEL PLATE
SECTION THROUGH GLASS
⅜" × 3⅝" LG. HEX. HD. BOLTS (WITHOUT PLATE)
⅜" × 3⅜" " " " " (WITH ")
#12 STEEL PLATE
¾" × 3¼" D. M. & B.
CANVAS
1⅝" × 5¼" D. & M.
¾" × 3¼" D. M. & B.
HINGE
PLATES IN LOWER PORTION ONLY OF DOOR
FASTEN HINGE PLATE TO ¼" BENT PLATE WITH ¼" × 1" LG. R.H. RIVETS, CTSK. OUTSIDE
MEETING
HINGE
ALL LUMBER TO BE WHITE PINE OR CYPRESS
9/32" DRILL FOR ¼" × 1" LONG R.H. RIVETS. DRILL TO SUIT HINGES, LEFT & RIGHT.
THESE TWO HOLES TO BE DRILLED IN FIELD (CENTER HINGE) TO FASTEN THROUGH ENDS OF ½" RODS. BOLTS 4⅛" LONG.
13/32" DRILL BOTH SIDES FOR ⅜" BOLTS.
1'-0¼"
4½"
¼"
2⅝"
¾"
3⅛"
2½"
4¼"
4½"
SIDE
FACE
BENT PLATE FOR HINGE
SCALE: 1½" = 1'-0"
4" × 6" L LINTEL
¼"
4" × 4" L
8"
1'-0¼"
¾" × 3¼" D. M. & B.
6"
2'-8"
2'-10¾"
6"
2'-3⅜"
½" DIAMETER W.I. RODS
POLISHED WIRE GLASS
LOCATE IN FIELD
3"
2'-0"
1¼"
1'-0¼"
9'-0" OPENING
OUTSIDE ROW TO BE RIVETS
#12 STEEL PLATES BOTH SIDES
2'-1"
2'-4" OPENING
2'-3⅜"
1'-6" O.C.
#14 × 1½" FLAT HD. WOOD SCREWS
#12 STEEL PLATES BOTH SIDES
2'-4"
1'-0¼"
¼" RIVETS, 1" LG. CTSK. BOTH SIDES
6"
¼"
¼" × 1½" × 24" LONG ANCHOR STRAP
ONE HALF ELEVATION
ONE HALF PLAN

Construction Details—Shipping Doors. Hewitt & Brown, Architects, Minneapolis, Minn.

HERE *and* THERE *and* THIS *and* THAT

Conducted by RWR

IT IS just as we thought it would be. The readers of Pencil Points have expressed their approval of this little department for the publication of all manner of things in which we are all interested.

Remember, everybody is welcome. Send in your sketches, caricatures, questions, or interesting items of any sort and they will be considered. We do not guarantee to publish everything submitted but do not be bashful about sending in your contribution.

We got off to a bad start in publishing the verse "The Fifty-seven Lamps of Architecture" in our January number. This appeared in the Saturday Evening Post several months ago and the author is Mr. Stoddard King. Our apologies to the Post and Mr. King for having published this verse without credit.

Nothing daunted we print the offering labelled "Song" contributed by "Oong Gow."

Song

The Seasons

The Projet Season first I praise
When order on the table lays,
And Client with his lucre'd maw
Proclaims his whims to draw and draw.

And next I deed respective prize:
Facade and brave perspective rise,
As chief and straw-boss eye the sketches
And raw recruits die making stretches.

The detail stage! My chorus lifts
As plagarist the file stuff sifts,
His inspirations to imbue,
Bring out the old, ring in the new.

And these lines from the pen of Miss R. B., office typist.

Almost!

Oh the sketches we make, and the coin we stake,
On the jobs that never go thru;
Oh the effort we make, and the pains we take
That each line shall be straight and true.

Oh the hours of toil, and the midnight oil
On the weary days we spend
But the Fates have willed that the hopes we build
Shall but vanish in the end.

On the cruel mirage, be it but a garage
They always are sure to say
"We have changed out plans," so it simply stands
"We don't build, why should we pay?"

Oh the bills come in, and the bank roll's thin
And the payroll's just at hand
But well we know that an owner can't know
And he never will understand.

Oh the architect, could he but collect,
He could travel from coast to coast
If his dreams came true, and the fees came through
On the jobs that he got—almost.

WE QUOTE from a paragraph taken from a letter from Mr. George Edward Dorman, architect. Mr. Dorman has so well stated what we are trying to do that we print the paragraph even though it makes us blush just a little bit.

As to your work with Pencil Points. The greatest need in the profession today is that of men imbued with high professional ideals of service backed up with a fund of correct ideas as to how to go about serving, and I do not know of any magazine which is published for the draftsman which is going as far toward insuring this happy combination as is Pencil Points. More power to your elbow.

THE manner in which Mr. Leon R. Pescheret spends his spare time when in New York is not at all according to the usual ideas. Mr. Pescheret found himself so interested in our buildings that he grabbed a pencil and sketching block and did seven clever sketches of various buildings in a couple of days. We are sorry that the limits of space permit us to publish only one, showing Police Headquarters, which apparently Mr. Pescheret saw only from the outside. Anyhow, we enjoyed his call very much and hope he will drop in again.

Sketch by Leon R. Pescheret

Here are a couple of sketches submitted by Mr. Edwin Olsen of Boston. Who will be the newcomer in the March number?

Old Abandoned Farmhouse,
Ogunquit, Maine
Sketch by Edwin Olsen

HERE is a tough one. A New York architect writes as follows:

I am writing to ask you if you have or know of any standard for cubing a building. If so I would very much appreciate having a copy of same. Thanking you for your courtesy in this matter, I remain.

We cannot find any answer to this question. There seem to be several methods of cubing a building but none which can be called standard. If anyone knows of a court decision involving this point please send the answer to this department.

THE replies to the inquiry appearing here last month as to the best methods of filing plates has developed into a regular symposium. Mr. F. W. Ives, Ohio State University, Columbus, Ohio, submitted the following:

"For the purpose of saving worth-while plates and articles from magazines the best thing that I have found so far is the "Grip" Individual File Binder and Perforator, manufactured by the Cooke & Cobb Company, Brooklyn, New York. This may be had in substantial board covers or in several other styles. The binder mechanism of this folder file is arranged simply so that the single sheets being bound in it may be perforated for the staple with an ordinary pencil point. I have classified all of these materials and I find the various volumes very useful to me at times.

Mr. Donald Thornton Graf, Minneapolis, Minn., adds this to the discussion:

About a year ago it devolved upon me to install a filing system in the office in which I was working, the magazine plates being excellent in material but in such a chaotic condition that they were utterly usless. At that time it occurred to me that Pencil Points could render the suffering magazine files a great service, and now that Walter B. Brown has started the ball rolling in your January issue, I am moved to try to add something to its impetus.

Enclosed is a portion of the system that I invented, and found to be very satisfactory. It is based upon the A. I. A. system for filing manufacturers' literature, which has proven its worth. The features which I tried to incorporate are—

1. Flexibility. A system which would be adaptable to large or small collections. In a small collection only the first major divisions need be used, and as the file grows the subdivisions may be added. The numbering system used in the A. I. A. construction classification was used for its easy readability and possibility of a greater number of divisions than nine, which is the limit with a decimal arrangement.

2. Simplicity. A system which would obviate the necessity of cards or cross-indices. The cross references that I found were necessary are in the catalogue index. No system can take care of a plate which has a nice door detail, a wrought iron lamp, and maybe several other features, all of which one wants to save. When this

Tremont Street, Boston
Sketch by Edwin Olsen

occurred. I wrote on a yellow sheet, "Wrought Iron Lamp, see 11e11, Doorway to Mr. Smith's House" and inserted in the file of lamps. However, when one does not find the desired plate in the first division that occurs to him, the rest of the file is not locked up, he can look in the other likely divisions which are narrowed down to a very few.

The general outline is arranged alphabetically.

The file is arranged so that one ordinarily familiar with architectural styles could maintain it, as few as possible of the divisions depending upon style. I numbered every plate that went into the file so that even if they were allowed to accumulate after use on the boards for some time, it was the work of but a few minutes with a vertical filing case, to replace them all in their proper places.

3. Comprehensivenesss. The fact that about twenty-five thousand plates have been filed with this system by myself and friends shortly out of college who are assembling libraries, without finding any plate of value not taken care of by the file attests to its completeness.

Will be very glad to get the ideas of others on such a problem as this one, for surely many of your readers must have been confronted with it and have devised solutions and developed ideas. I hope, with Mr. Brown, that Pencil Points will take this problem in hand and pursue it to a successful conclusion as they have other questions.

Good luck to "RWR" in his H&T&T&T!

Index for Magazine Plate File. See "Brickbuilder," April 1908, also.

General Index.

1. ADMINISTRATIVE and GOVERNMENTAL
2. BRIDGES
3. BUSINESS and COMMERCIAL
4. EDUCATIONAL and SCIENTIFIC
5. HOSPITALS and ASYLUMS
6. HOTELS and APARTMENTS
7. INDUSTRIAL PLANTS
8. MONUMENTAL
9. RECREATION and AMUSEMENT
10. RELIGIOUS and ECCLESIASTICAL
11. RESIDENTIAL
12. SOCIETY BUILDINGS
13. TRANSPORTATION and STORAGE
14. MISCELLANEOUS
15. OFFICE PRACTICE
16. HISTORICAL

1. ADMINISTRATIVE AND GOVERNMENTAL

1a Capitols, Houses of Parliament, Governmental Bldgs.
1b Government Department and Office Bldgs. (Natl., City, etc.)
1c Buildings used in Diplomatic Service (Embassies, etc.)
1d City and Town Halls, Municipal Bldgs.
1e Court Houses (see 1f2)
    1e1. Archive Bldgs.
1f Post Offices
    1f1. Post Offices and Custom Houses combined
    1f2. Post Offices and Court Houses combined
    1f3. Post Offices with any others
1g. Military
    1g1. Barracks, Military Post Bldgs.
    1g2. Armories
    1g3. Arsenals
1h. Protective and Corrective
    1h1. Police Stations (see also 1j1)
    1h2. Prisons, Penitentaries, Jails
    1h3. Reform Schools
    1h4. Workhouses.
1j. Fire Stations, Engine Houses
    1j1 Fire Stations combined with Police Stations

2. BRIDGES

2a Wood bridges
2b. Masonry Bridges, stone, brick, concrete
2c. Steel and Iron

8. MONUMENTAL

8a. Commemorative (for memorial buildings of special type such as "Memorial Auditoria," see Auditoria.)
8b. Funerary
8c. Tablets and Doors.

9. RECREATION AND AMUSEMENT

9a. Public Assembly
    9a1. Theatres and Opera Houses
    9a2. Stadia, Outdoor Amphitheatres, Observation Stands
    9a3. Municipal Auditoria
9b. Park Buildings
    9b1. Administration
    9b2. Refectories
    9b3. Zoological
    9b4. Band Stands
9c. Athletic and Competitive
    9c1. Baths, swimming and otherwise, Locker Bldgs.
    9c2. Billiard and Pool Rooms, Bowling Alleys
    9c3. Gymnasia, Turn Halls, Squash Courts.
    9c4. Rinks, Riding Halls and Schools.

12. SOCIETY BUILDINGS

12a. Fraternal
    12a1. College Fraternities and Sororities
    12a2. Masonic Temples
    12a3. Other Lodge Buildings
12b. Y. M. C. A. & Y. W. C. A.
12c. Country Clubs, (Auto, Golf, Tennis, etc.)
12d. City Clubs
    12d1. Residential
    12d2. Non-Residential
12e. Surburban Clubs
12f. Learned Societies, Benevolent Societies

Mr. B. O. Gamber of Detroit comes to bat with the following:

The request of Mr. Walter B. Brown, regarding the filing of plates comes at a good time and I should like to reply to it.

I have worked in a number of offices, with as many different filing systems, but the scheme which we are now using has many advantages.

The plates, carefully selected, are placed in legal size folders in a steel filing cabinet. The folders are of the bellows type and are properly labelled and numbered and arranged in the file in alphabetical order. The subject desired may be quickly found by selecting the proper folder, or by referring to an index.

Each plate is numbered, and when returned to the library it is placed in a basket. These returned plates are regularly filed in their proper places.

As this material is valuable, it receives good care, and the writer prefers it to any which he has used.

Your journal deserves its success for promoting this interchange of ideas, and fostering a real spirit of helpfulness and cooperation among the architectural fraternity.

Here is something entirely different. It looks complicated but it has its good points. Mr. Oliver Wilson of New York is responsible for it.

Mr. Brown has come up against the same difficulty that I faced some years ago, that of the best method of filing the accumulating mass of material into a system easy to operate.

It so happened, that having to use some material issued by the Lefax Corp. of Philadelphia in my studies, that I became interested in the Dewey system of Library Classification which is one of the systems that they suggest filing their material with.

Through the courtesy of the local circulating Library, I was enabled to borrow a copy of the detailed classification.

I had been filing my material in an arbitrary manner of my own, but it was not satisfactory. And here I found a system already prepared by men and women who had spent their whole lives in classifying material and so I decided to use it.

For the benefit of those not knowing of the system, the following is a brief outline of it.

All knowledge is divided into ten divisions from 000 to 900; each division is again subdivided into ten divisions such as 700 to 710 and a third time such as 720 to 729. Any further division is done after a decimal point.

So useful is this classification that Mr. Ricker of the University of the Illinois undertook a very detailed classification of those sections of the general classification which have to deal with Architecture and Building, chiefly from 690 to 729.

The beauty of this system is this. All the work has already been done by others more fitted to arrange material in order. So why do unnecessary work? Secondly, kindred subjects are purposely arranged near together and there is no definite break throughout the whole classification, each subject gradually merging into the next. Thirdly, a number is far easier to remember than a long worded title or a system of letters and numbers. Fourthly, knowing the numbers, it is possible for one to go into a reference Library where they use this system and go at once to the sections to which you wish to refer without the necessity of long hunts through catalogues.

When filing the material, I have found it best to use a fifteen-inch-wide drawer filing cabinet and to trim the material so that the top of the folder can be seen.

Also to expedite finding the material I have gotten different colored filing tabs in which the numbers can be placed as follows.

All main divisions, such as 729 are in red tabs well to the left of the folder, then folders with a decimal point such as 729.3 there is a little green tab with the number 3 in it a little further to the right, and if further identification is necessary for numbers to two decimal places I use a yellow tab such as 729.36 where the 6 would be in a little tab. So that on looking at a drawer you see a line of red tabs to the left, then a greater number of green tabs and occasionally a line of yellow tabs. These tabs are bought in strips, made of colored celluloid with a space for slipping in headings with gummed canvas with which to fasten them onto the folders.

When filing, I arrange the material into the chief subjects, for instance all residential material goes into the folder 728 and later I file this material into its proper division as the folder increases to an abnormal size or as I need the material.

I hope that this is not too long a discussion of the subject, but perhaps an illustration of how it works in its subdivisioning might be helpful.

724.0 Renaissance and Modern History of Architecture. General topics, etc.
724.1 Renaissance Architecture General topics. 1500 to 1800.
724.15 Renaissance Architecture in Italy
 .151 Cinquecento in Italy
 .152 High Renaissance
 .153 Decadence
 .154 Baroque

Throughout the Historical part of the Classification of Architecture .05 is typical of Italy so that modern Italian is 724.95 which makes it very easy to remember the various divisions.

For instance .073 is the subdivision for the United States and so on.

If Mr. Brown, or any one else is interested in this system and would like to hear more about it, I shall be very glad to help them. It is worth while remembering however, to boss the system and not let the system boss you. I have changed the subdivisions in several places so that I can get better use out of it.

There is also a lengthy communication and classification of subjects from Mr. Paul V. L. Stewart of Cleveland. Unfortunately, because of lack of space, this cannot be included in the current issue, but we expect to publish it next month.

HERE is a suggestion from Eric Fleming, New Brunswick, N. J. What has anyone to say about Mr. Fleming's idea?

> "Your registration of men engaged in the practice of architecture and engineering, who have not achieved the status of being in the practice of their profession as principals, suggests to me the fact that there is no society other than purely local gatherings to cement the 'Brotherhood of the Board' together, in the field of architectural men, before they have achieved that status. The position which PENCIL POINTS occupies and the want which it meets in the desires and ambitions of the 'Pencil Pushers', places it in a way to act as sponsor for such a brotherhood, in a way that would probably surpass expectations. Hoping that this suggestion is not untimely or impractical, I am
>
> Yours truly,
> (signed) ERIC FLEMING."

Sketch by O. McCrackin, of Hutchinson, Kansas.

IN ITS series of contests to encourage individual creative work among the younger artists, Corona Mundi, International Art Center, announces a Contest for a Modern Costume, based on the style of Atlantis. The choice of subject for the contest at this time has been influenced by the recent excavations in Egypt as well as the brilliant examples of Mayan culture unearthed in Central America. It is felt that in these new discoveries of the beauties of the past history of man in an "Atlantean civilization," may be found vast material for application to modern design.

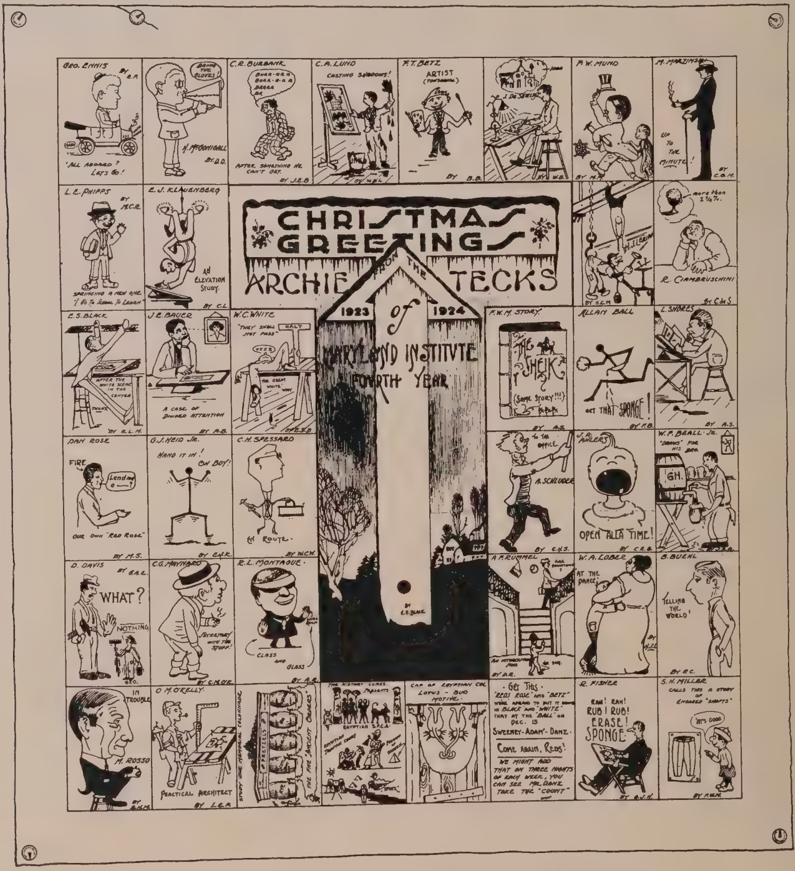
There will be three prizes of $100, $50 and $25. The judges will be Alfred Bossom, eminent American architect, Peyton Boswell, famed critic and editor of the International Studio, Howard Greenley, president of the Architectural League of New York, Samuel Halpert, American artist, and Louis L. Horch, the connoisseur and president of the Master Institute of United Arts. The contest will be closed on April 1st, 1924.

All information as to the conditions of the contest may be had by addressing, Corona Mundi, International Art Center, 310 Riverside Drive.

BALTIMORE takes a seat on the Band wagon. Here is a letter from the president of the class in architecture of 1923-4 Maryland Institute, with reproduction of the accompanying drawing.

> The enclosed print may prove of interest. Aside from its holiday message it presents a gallery of the members of Class in Architecture, 1923-1924, Maryland Institute, Baltimore, Maryland. Each member of the class appears "done" by one of his collaborateurs (and as you will note) not necessarily a sincere admirer.
>
> Incidentally, here you have a page of "Pencil Pointers," all ardent rooters for your publication. I am submitting this print for the newly-begun "Here and There and This and That" section.
>
> With best wishes for your continued success, I am
>
> Cordially yours
> For Class 1923-24 Architecture
> Maryland Institute—Baltimore, Md.
> (signed) John A. Ahlers, President.

Now all together men and let's make this department for March a hummer!



Above is reproduced at reduced size the clever Christmas Greeting of the Class in Architecture of Maryland Institute, Baltimore, Md. Each member of the class is caricatured by some other member.

THE New York Architectural Bowling League, for reasons not explained to us, has gone and published a calendar. Maybe so the members won't forget to show up at the appointed times. Anyhow here's a reproduction of the drawing with the names of the various offices constituting the League in cypher.

New York Architectural Bowling League Calendar

THE AMERICAN ART STUDENT

THE January issue of *The American Art Student* contains much of interest. Particularly interesting and informative is the article "In the Studio of Thomas J. Fogarty," by Frank R. Southard. This article gives an intimate account of the way in which this well-known illustrator works and in doing so makes clear the methods by which book and magazine illustrations in general are made. The most valuable feature of this article is the lucid explanation of the method used by the artist in securing expressiveness in his work through the making of rapid studies of his model, supplemented by more careful studies of detail. There is also an article on "Etching as a Fine Art," one on "The Art of Color" and many shorter articles and items together with interesting illustrations. *The American Art Student and Commercial Artist* is published at 21 Park Row, New York, and the subscription is $2.50 a year, $3.00 foreign.

DETAILING STONE WORK

BY J. R. SCOTT

(*Continued from Issue for December,* 1923)

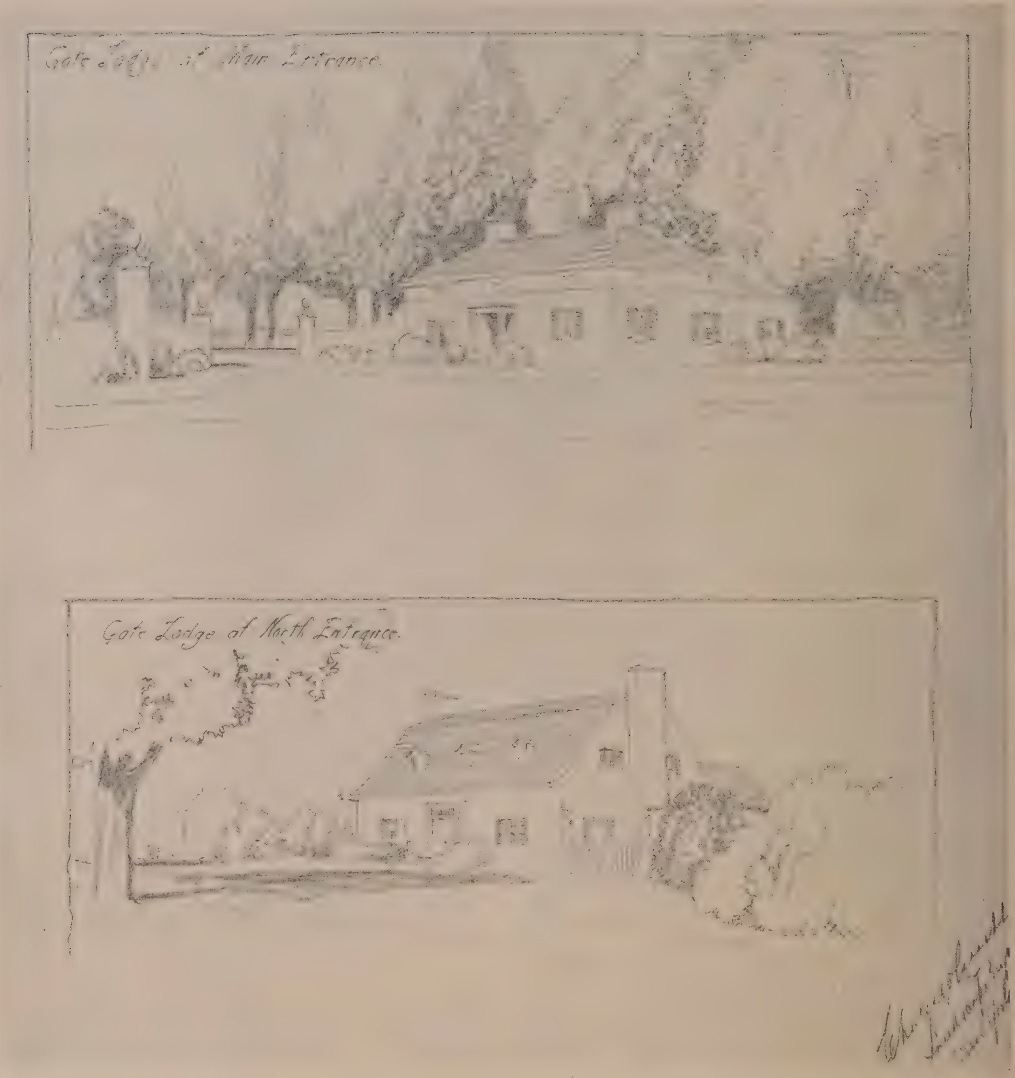
It is hardly necessary to give dimensions for every member of a large full size, but the over-all should be shown—and in agreement with the figures on the scale detail, which is not always the case. A draftsman often gets a detail of the section of a large Gothic arch, for instance, which shows the contour carefully enough, but has such short lines to indicate the wall line or the bed line that it is impossible to square it in order to find the height and projection. In drawing such a detail, almost always the first step is to lay out the location of the top and bottom beds, the wall line, and the extreme projection; if these lines are left to show on the blue print the correct sizes are thereby fixed.

Sometimes the architect omits the joint on a full size, and it is often difficult to work it in, especially if the section has small mouldings or carving filling the entire face and has been drawn with the stone occupying the full height allowance for stone plus joint, and perhaps has to line up with some feature of the adjacent stone as well. Sometimes he forgets the drips; whether specified or not, the draftsman likes to put them in for protection to the face of the stone, and often it is hard to find a place for them.

It is seldom wise to show isolated sections of moulded stones scattered about here and there on a sheet of details; show the beginning of the stones lying immediately above and below so that the stone draftsman can see the relation to them and can tell just how far back the finish is to continue. Show a portion of the frames of windows and doors so that he can know what fitting is necessary, exactly where the waterbar is situated, exactly where the threshold (or provision for metal threshold) must come, what depth in the wall the door sill must have to bring its back in just the right place, and how this back must be treated in order to fit the style and level of the flooring.

Show the steel that comes behind the stone; often the mere process of drawing it in place will bring up problems to be solved at once. Do not forget that splices and connections occupy space and require clearance, and that rivet heads usually have a projection. When using an angle with legs of unequal length for a lintel, indicate which leg is vertical and which is horizontal. Loose steel for lintels, etc., can generally be shifted a little to suit conditions, but its position should be indicated if possible, so that the contractor placing the steel will not have to consult with the stone setter to find out where it is to go, or, still worse, set it without consulting him. Much more important are cases where the stone has to fit around structural steel, but then usually there is a set of drawings to give all of this information. It might not be amiss to point out that often a few figures on the drawings will make it unnecessary for the stone contractor to consult the steel drawings at all; in any event they would show him the relation between the steel and masonry construction which otherwise is often quite difficult to establish.

Consider the balancing of the stone. The points mentioned above will often help to determine the proper thickness and the method of anchoring. The client gets no value received for stone in the wall, and it is therefore economical to use stone as thin as possible consistent with good practice. At the same time it should not be forgotten that the cut stone contractor is jealous of his reputation and is thoroughly anxious to have no failure attributable to him. When a piece of stone falls from the belt course, the layman blames the stone; he does not stop to question about unequal settlement of foundations, provision for taking up expansion and contraction in the steel structure, weakness of shelf angles, or how thin the stone had to be cut to clear the steel; to him it is the stone that failed, and self-evident that the fault is the stone contractor's.


Gate Lodge at Main Entrance.
Gate Lodge at North Entrance.

Pencil Studies by Birch Burdette Long. Charles W. Leavitt, Landscape Engineer.

A little variation on the full size from the scale drawings is usually accepted without quibble, but the draftsman soon sees if much extra work or material is being crowded on and he is often human enough to try to strike a balance by saving elsewhere. Architects or their draftsmen are apt to be carried away with themselves and load on far more detail than they had previously indicated (and which might often be left off with advantage to the appearance of the buildings). Making the working drawings to large enough scale compels consideration of many points liable to be overlooked, insures sufficient stock, indicates the amount of cutting, saves some of the full sizing entirely, and makes the rest of it much simpler. Also, it enables the estimator to prepare a more accurate figure without having to make allowance to cover leeway in detailing.

On work usually turned, such as balusters, there is not much doubt as to what portions are to be left square, but sometimes the architect knows so well just what part of an urn or a special lamp standard is to be turned that he takes it for granted that everybody else knows it too. Perhaps he intends a baluster to be square in plan throughout its entire height, but fails to indicate it.

Another point frequently overlooked is the size of wood mullions in a multiple frame where the sill is to be jointed centrally under the mullion and the only dimensions are the glass sizes and perhaps the total opening. Without figures giving the distance from inside of sash to stone jamb and from sash to sash across the mullion, or a line of dimensions locating the center lines of the mullions, it is impossible to find where to joint the sill. Of course certain standards exist, but they often vary with different localities.

Speaking of glass sizes, why does the architect work backwards in this respect? Let him calculate his window openings if he likes, so that the glass will not run just over a stock size, but he should not presuppose that the stone draftsman knows just how the frame and sash are detailed. Figuring the stone openings themselves is far more satisfactory; it fixes the sizes for the stone contractor, and at the sash and door factory it is just as easy to take the dimension from the jamb line as from the glass. In the case of brick walls, it is out of the question to split a course of bricks to make the lintel fit the frame, and the custom is to nail on the blind stop tight against the lintel; this is good enough but it would be just as easy to make the frames to the exact height. It is neither very expensive nor wasteful to trim a half-inch or so from the top of a sheet of glass.

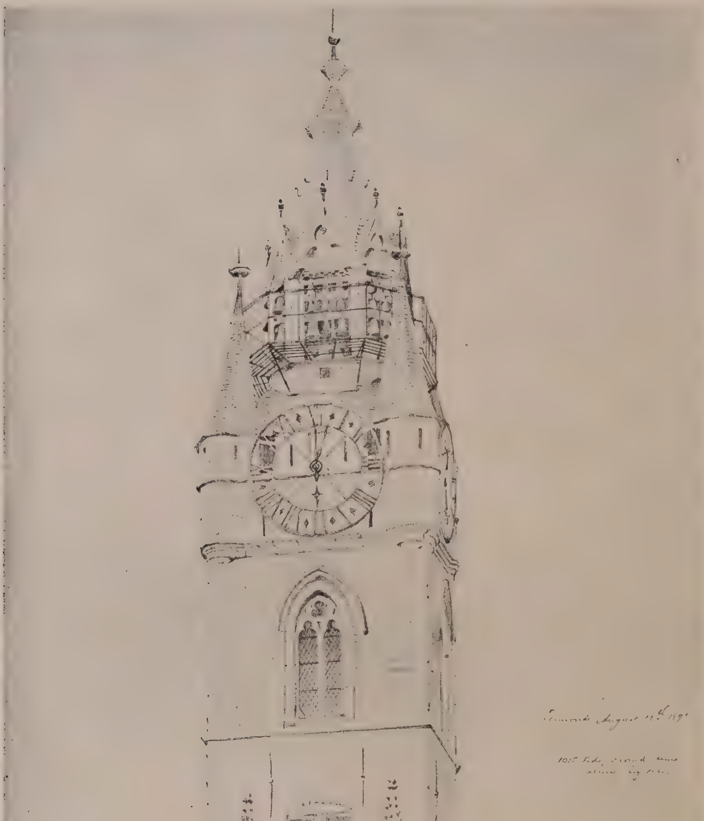
Metal "factory sash" present a situation somewhat different to that encountered with wood frames. Here is more standardization of sizes and no leeway for fitting the job. As these sash (especially the standard sizes) are chiefly confined to the plainest work, where the design is governed almost entirely by structural and not by architectural considerations, any discrepancies in the lining up of the top of the sash with the brick joints may usually be overlooked.

There is this to be considered when using metal factory sash or metal casements with stone or brick, and that is the location and detail of the steel at sill, jamb and lintel. Almost every manufacturer uses sections and combinations of sections differing to some extent from all others, and the architect and his draftsman should be sure of just what make and section has been ordered (and this is not always the one specified) before he begins his detail; or he should make certain that the stone company be informed of the exact requirements of the particular sash manufacturer, which can usually best be done by having the latter send him a copy of the section approved by the architect.

The working drawings should indicate somewhere the position of adjoining buildings, if any. This is for the architect's own benefit as well as for the contractor's. It is surprising how frequently it happens that a base course has to be cut off at the property line instead of returning around the corner as shown, or how a cornice has to have its return projection greatly decreased or entirely cut off because there is no room for it to overhang on the sides. And even if this point has been provided for, the exposure on the side should be shown, for there is nothing gained by returning the stone a couple of feet when a permanent building touching it is set back only a few inches.

Some architects would overlook none of these points, others might miss a good many of them. The architect does not always consider the psychological effect of carefully detailed drawings. Certainly to the more or less highly trained stone draftsman it makes the greatest difference. When on unrolling a set of blue prints he finds well executed drawings with all the little details considered, almost unconsciously he sets for himself the same high standard, with the result that the owner gets a better building at not one penny additional cost and frequently with the saving of an appreciable sum for extras, and the architect has added one more to the list of buildings he is proud to claim as his creations.

Pencil Sketch by A. Leslie Perry



Pencil Study by Albert Kahn

THE SPECIFICATION DESK

A Department for Specification Writers

MISCELLANEOUS ITEMS OF CONSTRUCTION
PART XV

By Otto Gaertner

In this series of notes Mr. Otto Gaertner, A.I.A., Associate Member American Society of Civil Engineers, is treating of a number of the minor matters of construction that are troublesome unless the architect happens to have met a similar problem previously—matters of a more or less special nature.—Ed.

Garages (*Continued*)—An emergency release is a device placed in the elevator car where it can easily be reached by the operator in case of fire, accident, panic or other emergency. It provides a means of rendering the car operative independent of the position of car gates or landing doors provided with electric contacts or interlock devices.

There are, of course, numerous devices which tend to increase the safety and efficiency of the elevator equipment, such as limit devices, elevator brakes, operating devices, slack rope devices, reverse phase relays, car leveling devices, car locking devices, speed governors, automatic safeties or controls, signal systems, grease and oil cups, guide lubricators, et cetera. Some of them are required by building codes, factory and labor laws, insurance and other regulations while others, although not mandatory, are certainly desirable.

An important thing to be considered is the type of electric current that is available, whether direct or alternating. Some of the equipment cannot be used with both types of current and the cost of the installation may be greatly affected by the type of current to be used. Also it may be necessary to provide transformers to change the current so that it may be used for the signal system or other parts of the apparatus. An outlet should be provided midway on the height of the shaft, to which is connected a flexible cable for current to supply the ceiling light in the car. An electric feeder of ample size to suit the elevator machine motor should be brought inside the machine room and should be provided with fuse blocks, fuses, and cut switches, preferably of the enclosed safety type.

We have mentioned wire mesh elevator shaft enclosures and shaft doors but it would be well to touch upon the construction of the shaft itself in considering general garage construction with the idea of reducing fire hazard. Shafts should be enclosed with walls of fireproof material such as concrete, brick, terra cotta blocks, or gypsum blocks of a suitable composition that will not be softened or crumbled by a stream of water in case of fire. Brick walls should be at least eight inches, concrete at least six inches and three inches if properly reinforced, and terra cotta and gypsum blocks should be at least three inches thick. Such walls should be properly reinforced with steel members unless they are supported on fireproof material at each floor. In the block walls door and window openings should be stiffened with iron angles or channels. When altering an existing building it is often difficult to construct the shaft this way. Another, but less effective method of construction, is to erect metal studding of one inch steel channels about twelve inches apart fastened at the floor and ceiling, and plastered on metal lath applied on both sides of the channels. This method can easily be used in non-fireproof buildings. The plastering should be continuous for the full height of the shaft and such plaster should preferably be cement plaster one inch thick applied in several coats.

There should be no openings into the shaft except door openings and windows to the outer air, the window openings being protected or marked to identify them as shaft openings, as has been mentioned in a previous installment of this article. If the elevator machinery is in a room at the bottom of the shaft and connecting to the shaft, both the bottom of the shaft and the machinery room should be enclosed with fireproof material, as mentioned above, and the door openings into the machinery room should be provided with fire doors as specified for the shaftway.

The top of the shaft should extend at least three feet above the roof and should be enclosed with the same fireproof construction and if possible three-quarters of the area of the top of the shaftway should be covered with a metal skylight of plain glass, or any other except wired glass, glass being not more than three-sixteenths of an inch thick and not having an area of more than seven hundred and twenty square inches for any one piece. The plain glass can be quickly broken by firemen to give the smoke and flames an opportunity of escaping from the shaft and enable them to fight the fire more advantageously. The glass can be protected from damage from above by placing a wire mesh screen about six or seven inches above it. Such a screen should be of number 12 gauge wire or heavier, and the mesh should be between three-quarters of an inch and one inch. The screen should project beyond the glass for about the same distance as it is above it. A skylight cannot always be used when the elevator machinery is at the top of the shaft and sometimes the shaft does not extend to the top story, in which case it should have fireproof construction for the top as well as for the walls. Often when a skylight is impracticable, if the shaft is high enough, a window of the same area, or several windows aggregating the same area, can be placed at least three feet above the roof and serve the same purpose.

There are no rules stating just when a garage shall be of fireproof or of non-fireproof construction, but it should be fireproof whenever the initial cost can be met. It may be interesting to know that the Bureau of Buildings of the City of New York classes garages under business buildings and requires such buildings to be of fireproof construction when they exceed fifty feet in height and are used as garages, motor vehicle repair shops or oil selling stations within the fire limits of the city and within the suburban limits. Such buildings which existed as non-fireproof buildings when the building code went into effect are not required to comply with this rule except when they are altered or when they are non-fireproof buildings being converted into garages, motor vehicle repair shops or oil selling stations. When such buildings are altered or converted, the columns and girders, unless of fireproof construction, and all wood floor and roof construction shall be covered and protected on all sides with such fire-retarding materials and in such a manner as may be prescribed by the rules of the Board of Standards and Appeals. The one exception to this, however, is that an existing one-story building without a basement or cellar may be permitted to omit this protection for the roof construction.

New buildings used for these purposes may be constructed of frame construction in an approved manner, provided that such a building does not exceed twenty-five feet in height, does not exceed five thousand square feet in area and does not cover, together with other frame buildings, more than eighty per cent of that part of the lot or plot area on which they occur and which is not already covered by fireproof or non-fireproof buildings.

Sheet metal or other approved noncombustible and weatherproof material is generally permitted for the walls of garages and similar buildings provided that such a building is not more than one story high with side walls not exceeding fifteen feet in height and provided that the area covered does not exceed one thousand two hundred and fifty square feet. Also all the sides, except for the necessary door and window openings, and the roof of the building shall be of the same construction.

Sheet metal used in this way shall not be less than number twenty-six gauge in thickness. Galvanized iron sheets on steel frames are generally used in this construction.

The Bureau of Buildings of the City of New York also restricts the use of buildings for garage purposes if they are at the same time put to other uses. For instance, no permit for a storage garage will be issued for any building occupied as a tenement house, hotel or lodging house, nor for any building where paints, varnishes or lacquers are manufactured or kept for sale, where drygoods or other highly inflammable materials are manufactured or kept for sale, and where rosin, turpentine, hemp, cotton or any explosives are stored or kept for sale. The prospective garage owner not coming under this jurisdiction can bear these conditions in mind and avoid them in other localities as the fire hazard is as bad for him as for the other man's business. For the benefit of the public further restrictions are placed on the issuing of garage permits by zoning laws and by the requirement that a garage may not be within twenty feet of the nearest wall of a building occupied as a school, theater or other place of public amusement or assembly. Renewals of permits may be granted, however, where a garage was in operation prior to the opening of the school, theater, or other place of public amusement or assembly, or where it has been in continuous operation under a permit issued prior to the enactment of the present building code. Also a permit may be issued for a garage erected within twenty feet of a building occupied as mentioned above when the garage has no frontage on the same street with any frontage of such a building, and when the wall or walls of the garage adjacent thereto are constructed of brick, stone or concrete unpierced by door, window or other openings for a distance of at least twenty feet from the building.

A LETTER ON SPECIFCATION WRITING FROM ARTHUR M. DUNCAN.

THE writer was fortunate a few days ago in catching the editor when he had a few moments to spare and having an informal chat on various topics which might prove interesting to the architect, his specification writer and the draftsman.

The line of least resistance in writing the specification seems to be the getting out of a bunch of ancient documents, picking out the one which seems to best suit the case, sharpening the blue pencil, putting in a hurry call to the the office boy for the scissors and paste pot and starting in.

We remember having seen an old curio of a hand written specification for a Civil War warehouse in the leather district of the "Swamp" and many of the paragraphs in our "key" specification which we are about to use on the problem at hand seem strangely familiar. Through just how many generations this specification has descended we can scarcely imagine, but we know it is still alive and doing business.

Where the beams were oak and white pine we change them to spruce and yellow pine, and the black walnut and ash trim we alter to sap gum and oak.

The concrete is "deposited in six inch layers, carefully tamped until the water flushes to the top" and not further agitated or jarred in any way under the most severe penalties.

We suppose if a motor truck rumbles near our footings they must be dug out and put in again. (In this age of bootlegging trucks in the wee sma' hours the problem is going to be a hard one to take care of our anemic concrete work.)

The beams are framed with "tenon and tusk" and we begin to wonder if the carpenter still possesses the two-handed boring machines that our great grandfather carpenter used to use as he sat astride a pile of white pine beams and drove his 1½ inch augur into the mortise.

However, the specification must be rushed as the drawings are ready to print, so we struggle with the old wreck and make the best of it, hoping the builders won't submerge us with phone calls asking us if we really mean what we say. I am sorry to say that I have seen, as specification writer and as estimator in a builder's office, many such specimens of specifications—and at the same time accompanied by a beautifully drawn set of plans all clearly and completely figured and noted indicating much thought and time spent on the design. I think the answer to that is that the ratio of time allotted to the preparation of the specification as compared to the time given to the drawings is all wrong. The one is such an inseparable part of the other that its importance must be realized and sufficient time given for its study and preparation and checking with the drawings.

An outstanding feature of the average specification is the constant repitition of stock phrases and terms such as "hereinbefore mentioned," "Approval of architect," "as directed," "guaranteed," "first-class," "as per rules of Board of Fire Underwriters and Building Law," etc., etc.

All of these descriptive and limiting phrases can be collected under the headings of "Workmanship" and "General Requirements" clearly stated in a few clauses and then forgotten for the rest of the specification. If these solemn warnings hiding all sorts of dire penalties have no weight with the contractor when he reads them once, it won't produce a change of heart even though they appear on every page.

This "as directed by architect" is one of our best sellers. If you get stuck in the description of a material or finish just insert the magic words—and figure it out on the job.

The meat of the specification is to state what the materials are and where they are to be used and to give the bidder credit for knowing his product and the most up-to-date methods of workmanship. To keep track of the improvements in machinery for drawing metal mouldings and attempting to describe the only process which you will permit the sub to use is a Herculean task and takes much midnight oil.

I think we would all learn a lot if, through your columns, we were to get criticisms by the general contractor and the sub-contractor on the architects' specifications. They could tell us exactly of the pit-falls encountered and the "trick" clauses that make accurate and safe estimating very difficult.

For the contractors to criticise the architects' specifications is a very delicate matter and few would attempt to do it on an operation they were figuring, but it would be a very valuable thing to have such criticism and especially on a larger building such as an office building or apartment house where units of all kinds are repeated by the hundreds and where the bidder's factor of safety of a few dollars due to lack of definite information or vague description means an estimate out of all proportion to the work involved or a serious loss.

PUBLICATIONS OF INTEREST TO THE SPECIFICATION WRITER.

Any publication mentioned under this heading will be sent free, unless otherwise noted, upon request, to readers of PENCIL POINTS *by the firm issuing the publication. When writing for any of these items please mention* PENCIL POINTS.

Handbook of Hollow Building Tile Construction.—Handbook covering the subject. Many construction drawings covering wakksm floors, window openings, chimneys, roof details, etc. Specifications and much useful information for architects, draftsmen and builders. 110 pp. 8½ x 11. Hollow Building Tile Assn., Conway Bldg., Chicago, Ill.

Concrete for Town and Country.—A service book of information useful to the architectural profession. Covers completely the various uses of concrete, Detail drawings, tables, specifications, etc. Fully indexed. 190 pp. 8 x 11. Lehigh Portland Cement Co., Allentown, Pa.

Crittall Casements.—Catalog No. 22, profusely illustrated with exterior views, sections, details, etc. Includes standard and special hardware. 76 pp. 9 x 12. Crittall Casement Window Co., Detroit, Mich.

The Pergola Album No. 30.—Illustrating many types of pergolas in their settings. Very useful to those interested in country houses and grounds. 32 pp. 8 x 11.

Hartmann-Sanders Co., Elston & Webster Aves., Chicago, Ill.

Presteel Lumber Manual.—Handbook of information on metal lumber for a variety of uses. Tables, dimensions, detail drawings, data on walls, partitions, roofs, floors, etc. 56 pp. 6 x 9. North Western Expanded Metal Co., 407 Dearborn St., Chicago, Ill.

The Book of Masterbuilt Floors.—Loose-leaf portfolio on subject of floorings for various types of buildings. Complete technical composition, standard specifications and much useful data. 36 pp. 8½ x 11. Master Builders Co., Cleveland, Ohio.

Town and Country Buildings.—Brochure illustrated with photographs and drawings, floor plans, garages, etc. 32 pp. 8½ x 11. Southern Pine Assn., New Orleans, La.

Published by the same firm "School Architecture," illustrated booklet on the subject and "The Standard Moulding Book," illustrated with full size profiles of a wide variety of excellent mouldings.

Iron Fence Designs.—Book B. Illustrations of a wide variety of iron fence designs suitable for many uses. Entrance gates, ornamental lanterns, etc. 80 pp. 9 x 12. Stewart Iron Works Co., Cincinnati, Ohio.

Kohler Specifications.—Loose-leaf book containing illustrations of the Kohler line of plumbing fixtures with specifications therefor. 8½ x 11. Kohler Company, Kohler, Wis.

Published by the same firm "Enameled Plumbing Ware," booklet describing processes of manufacturing and illustrating correctly equipped bathrooms and kitchens and many specialties. 48 pp. 5½ x 8.

Artist's Materials.—Complete handy catalog of artist's materials, drawing instruments, etc. Fully indexed. 140 pp. 5 x 6½. Devoe & Raynolds Co., Fulton & William Streets, New York.

Casement and Vertical Fixtures.—Specification portfolio with illustrations, details and complete data. 8½ x 11. The Williams Pivot Sash Co., Cleveland, Ohio.

Coburn Handbook.—Catalog No. 51. Loose-leaf, illustrates and describes complete line carrying track systems, sliding door hardware, fire doors, etc. Detail drawings, price lists, etc. 8½ x 11. Coburn Trolley Track Mfg. Co., Holyoke, Mass.

Roof Flashing Handbook.—Details and specifications. Blue prints, construction drawings. 48 pp. 6 x 9. The Barrett Company, 40 Rector St., New York.

Portfolio of Color Plates.—Series of color plates showing exteriors and interiors tastefully treated. All the important rooms of a house are considered with many details. National Lead Co., 111 Broadway, New York.

Tapestry Brickwork.—Brochure illustrated in color containing both exterior and interior treatment. 48 pp. 8 x 11. Fiske & Co., 25 Arch St., Boston, Mass.

The Roof Beautiful.—Brochure illustrated in color on the subject of roof treatment. 8 x 11. 32 pp. Ludowici-Celadon Co., Monroe Bldg., Chicago, Ill.

Architectural Woodwork.—Attractive portfolio illustrated by photographs and a series of drawings by Chester B. Price. 32 pp. 9 x 12. Matthews Bros. Mfg. Co., 52 Vanderbilt Ave., New York City.

Bronze Tablets.—Catalog T. Looseleaf portfolio illustrated in photogravure showing wide range of tablets for memorials and other purposes. 70 pp. 9 x 12. The Gorham Co., Providence, R. I.

Raymond Concrete Piles.—Handbook on the subject with illustrations, detail drawings and much useful data. 60 pp. 8½ x 11. Raymond Concrete Pile Co., 90 West St., New York City.

Frame Construction Details.—Book of 28 full page plates covering subject of frame construction as applied to the residence problem. Three types of construction are fully shown and described. 8½ x 11. National Lumber Mfrs. Assn., 750 McCormick Bldg., Chicago, Ill. Price $1.00 per copy.

Handbook of Ornamental Iron and Wire Work.—Catalog No. 8. Covers subject of grilles, window guards, desk and counter railings and many other spe-

Your Home Screened the Higgin Way.—Attractive illustrated booklet on subject of screening and weatherstrips. 14 pp. Color plates. 8½ x 11. Higgin Mfg. Co., Newport, Ky.

American Walnut.—Booklet setting forth the qualities and uses of this wood. Many attractive illustrations. 48 pp. 7 x 9 American Walnut Mfrs. Assn., 616 South Michigan Blvd., Chicago, Ill.

Medusa Waterproofing.—Booklet on the subject setting forth uses, methods of application, etc. 36 pp. 7 x 9. Sandusky Cement Co., Cleveland, Ohio.

Architectural Ornamental Iron Work.—Catalog on the subject profusely illustrated by drawings and photographs. 66 pp. 8½ x 11. Hughes, Keenan Co., Mansfield, Ohio.

Modern Furnace Heating.—Treatise on subject as applied to dwellings, churches, stores, etc. 48 pp. 6½ x 9½. Hess Warming & Ventilating Co., 5 No. La Salle St., Chicago, Ill.

cialties. Convenient pocket size. 175 pp. 4 x 5½. Buffalo Wire Works Co., Buffalo, N. Y.

Structural Waterproofing.—Handbook on the subject of interest to architects, draftsmen and engineers. Specifications, detail drawings. 40 pp. 8½ x 11. The Truscon Laboratories, Detroit, Mich.

Structural Pressed Steel.—Booklet dealing with floors, roofs and partitions. Many illustrations, diagrams and details. Tables. 24 pp. 8½ x 11. Truscon Steel Co., Detroit, Mich.

Book of Hardware Designs.—Profusely illustrated brochure covering plain and artistic hardware. 75 pp. 5½ x 9½. Sargent & Co., New Haven, Conn.

The Banking House in Art Metal.—Illustrated portfolio covering equipment of bank buildings throughout. Furniture, grilles, railings, filing equipment, bank vault equipment, etc. Detail drawings. 72 pp. 8½ x 11. Art Metal Construction Co., Jamestown, N. Y.

Frink Lighting Service for Hospitals.—Catalog covering special lighting equipment required for this type of building. 12 pp. 8½ x 11. I. P. Frink, 24th St. & 10th Ave., New York City.

Published by the same firm "Lighting Service for Stores," 24 pp., and "Picture Lighting," 24 pp.

The Waterproofing Handbook.—Complete information on the subject in convenient form. Diagrams, tables and other data. 96 pp. 6 x 9. General Fireproofing Co., Youngstown, Ohio.

Better Built Homes.—Portfolio covering subject of woodwork for the small residence. Many attractive designs of small houses with exterior and interior details, color plates, etc. 8½ x 12. Curtis Companies, Clinton, Iowa.

"Permanent Furniture," attractive booklet on window seats, mantels, china cupboards, sideboards, dressers, etc. 50 pp. 5½ x 7. "Interior Doors and Trim." Uniform in style with the above. "Windows for Better Built Homes." Uniform with above. "Entrances and Exterior Doors," another number of the same series. "Stair and Stair Parts." Covers subject indicated. "Porches and Exterior Woodwork." Uniform with the above.

Modern Homes.—Illustrations and floor plans of small houses suitable for interpretation in wood construction. 50 pp. Southern Pine Assn., New Orleans, La.

Condulets.—Catalog No. 2000. Complete handbook on subject of electrical specialties. Handy pocket size. 714 pp. Thumb indexed, limp covers. Crouse-Hinds Co., Syracuse, N. Y.

Modern School Lighting.—Bulletin No. 344. Covers subject from a technical standpoint. Much engineering data. 36 pp. 6 x 9. Holophane Co., 342 Madison Ave., New York City.

The Pedestal Pile.—Complete description of this type of concrete pile. Drawings, diagrams, installations, etc. MacArthur Concrete Pile and Foundation Co., 55 John St., New York City.

Caldwell Tanks.—Illustrated handbook on subject of tanks for all uses, both industrial and in connection with various types of buildings and country estates. Accessories. 92 pp. 8 x 11. W. E. Caldwell, Inc., Louisville, Ky.

Arkansas Soft Pine Handbook.—Text and moulding designs, grading rules, diagrams and much useful data. 62 pp. 8½ x 11. Arkansas Soft Pine Bureau, Little Rock, Ark.

Portland Cement Stucco.—Booklet on the subject with large details showing various types of panels. Typical construction details. 8½ x 11. Portland Cement Association, 111 West Washington St., Chicago, Ill.

Measuring Tapes and Rules of Every Description.—Catalog No. 10. Shows complete line of tapes, rules, protractors, etc., for architects, draftsmen and engineers. 122 pp. 6 x 9 in. Lufkin Rule Co., Saginaw, Mich.

Flush and French Doors.—Catalog F. Illustrated with many full-page color plates showing full line of panelled and plain doors and French doors. Details of construction and plates showing interior treatment. 80 pp. 8½ x 11. Roddis Lumber & Veneer Co., Marshfield, Wis.

Duriron Acid-proof Drain Pipe.—A handbook for architects and engineers covering layouts for laboratories and other conditions involving the problem of pipe corrosion. Much valuable technical data. Sectional drawings, tables, specifications. 20 pp. 8½ x 11. The Duriron Co., Dayton, Ohio.

Berloy Building Materials.—Handbook for architects, draftsmen and specification writers, covering all types of metal lumber for a wide variety of uses. Covers floor construction and many other matters of particular importance. 400 pp. Handy pocket size. Bound in library buckram. Berger Mfg. Co., Canton, Ohio.

Weisteel Compartments.—Catalog No. 11 describing compartments of all types. Blue prints showing construction and method of erection. Specification, including hardware. A useful book to all in any way interested in industrial buildings, public buildings, schools, hospitals, etc. 32 pp. 8½ x 11 in. Henry Weis Mfg. Co., Atchison, Kan.

Detail Manual.—Hand book with detail drawings devoted to screening, storm door hardware, blind hardware, garage hardware, bolts and butts. Carefully compiled, and valuable reference work. Loose-leaf. 118 pp. 7½ x 10¾. Ask for "Manual P. T." The Stanley Works, New Britain, Conn.

Architectural Detail Folio.—Loose-leaf folio containing 26 plates of detail drawings showing various types of elevator door hangers and other hardware for use in connection with elevator doors. A valuable adjunct to any working library. Size of plates 11½ x 16. Size of portfolio 8½ x 11. Richards-Wilcox Mfg. Co., Y-21, Aurora, Ill.

Asbestos Protected Metal.—Bulletin 71. Describing this metal and its uses for industrial buildings. Much engineering data, diagrams and sections. 24 pp. 8½ x 11. H. H. Robertson Co., Pittsburgh, Pa.

Soss Invisible Hinges.—Booklet showing details and specification data. Hinges for furniture, cabinets and general use in buildings. 24 pp. Soss Mfg. Co., Grand Ave. & Bergen St., Brooklyn, N. Y.

Wall and Ceiling Handbook.—Data on wall and ceiling construction for the residence. 16 pp. 5½ x 7¼. The Bostwick Steel Lath Co., Niles, Ohio.

Limestone Homes.—Portfolio of a series of designs prepared by a leading firm of architects. 12 rendered perspectives, floor plans and complete information. 8½ x 11. Indiana Limestone Quarrymen's Association, Box 784, Bedford, Indiana.

Refrigerating Machines.—Catalog and handbook illustrating and dsecribing modern systems of refrigeration. Diagrams, specifications, tabular matter, etc. 8½ x 11. 32 pp. Lapham-Perkins Engineering Corp., 30 Church St., New York.

Tablets and Monuments in Bronze.—Illustrated booklet showing many examples of memorial and other tablets, bas reliefs, etc. 32 pp. 6 x 7. John Polachek Bronze & Iron Co., 494 Hancock St., Long Island City.

Central Cleaning Systems.—Descriptive booklet profusely illustrated on the subject of modern vacuum cleaning installations, suitable for all types of buildings. 8½ x 11. 32 pp. Spencer-Turbine Cleaner Co., Hartford, Conn.

Weatherstrip Manual.—AIA Classification No. 19C14. Technical booklet covering the subject. Monarch Metal Products Co., 4995 Penrose Bldg., St. Louis, Mo.

Panic Exit Locks.—Catalog No. 20 covering gravity and mortise types of exit locks for schools, theatres and all other buildings requiring such equipment. Sectional drawings showing operation. 32 pp. 8½ x 11. Frank F. Smith Hardware Co., 87 Clay St., Newark, N. J.

Color Harmony in Floors.—Booklet covering subject of floor treatment from entirely new angle. Maple Flooring Mfrs. Assn., 1082 Stock Exchange Bldg., Chicago, Ill.

Present Day Schools.—Illustrated brochure covering the application of terra cotta to modern school buildings. 32 pp. 8½ x 11. National Terra Cotta Society, 19 West 44th St., New York City.

Better Banks.—Illustrated brochure treating of modern bank buildings, large and small. 32 pp. 8½ x 11. National Terra Cotta Society, 19 West 44th St., New York City.

Color in Architecture.—Brochure illustrated in color and with numerous engravings in sepia, on the basic principles of the application of color in available mediums. 8½ x 11. 38 pp. National Terra Cotta Society, 19 West 44th St., New York City.

Atlantic Terra Cotta Monthly Magazine.—Vol. 6, No. 8. This issue deals with Terra Cotta in combination with other materials illustrated with photographs, details and two full page drawings showing construction. Atlantic Terra Cotta Company, 350 Madison Ave., New York City.

FROM the *News of the Baltimore Museum of Art*, the publication issued from time to time by The Baltimore Museum of Art, we reprint the following items of general interest:

Art Museums in the United States

During the past twenty years many notable art museums have been established. Forty-six cities have a fine building specially erected to house the art collections. In San Francisco the fourth gallery will soon be opened to the public; in New York there are six important buildings and many smaller public collections. In the State of Ohio, five cities have important art museum buildings.

The character and success of many of these art museums has been due to some great initial gift by one or more public spirited citizens. In other cases the membership has been built up slowly by the devoted service of a small group of men and women with municipal support as soon as the value of the work has been proved. The Metropolitan Museum in New York and the Art Institute of Chicago, the two largest art museums in the country, erect one unit of their building after the other as funds permit. Both have received many large bequests, often from unexpected sources, such as the Rogers bequest of over $5,000,000 to the Metropolitan Museum of Art.

In Detroit $40,000 was subscribed by the incorporators. Later $100,000 was raised for a building which was opened in 1888. Gifts followed rapidly. Recently the City has contributed ground for a new building and makes an annual appropriation toward maintenance.

In Toledo a remodeled home, lent by the President, was occupied from 1902 until 1912. The present ground and building are valued at $400,000; of this half was the gift of President Libbey and the balance was raised by popular subscriptions varying from 10c. to $15,000.

Importance of Art to the Community

Art is not for the "few." Art is for the "many." It touches closely the needs of the community. The eight-hour day has brought increased leisure. Interest in and understanding for that which is beautiful and inspiring will bring into leisure hours influences and occupations tending to counteract all that is vulgar, brutal and degrading. Toward that end one of the most potent instrumentalities is the museum of art.

"What this country needs more than anything else is education in aesthetic appreciation. Through this knowledge the City will profit in dollar and cents value and the State and Nation will gain standing."

"The real purpose of life is growth—we either grow or we wither and are sloughed off. This is as true of communities and institutions as of individuals. The growth that has been started by the Baltimore Museum of Art is reaching out and touching many interests. The individual serves the City, the City serves the State, the State serves the Nation."—*J. E. D. Trask.*

Pencil Sketch by H. S. Kates

PENCIL POINTS

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OPPORTUNITIES FOR YOUNG MEN IN ARCHITECTURAL WORK

THE present activity in the building industry, an activity which is certain to continue because of the need for buildings of all kinds, provides unprecedented opportunities for young men in the field of architectural work. This means great opportunities for development and advancement. With architects' offices throughout the country busy, and in many cases employing more men than ever before, there are splendid opportunities for young men to assume responsibility and forge ahead. There is now no need for a man to stand still. He has a chance to show the stuff he is made of and whatever knowledge of architectural work he may possess. Under these conditions there is an incentive to earnest work and study.

PENCIL POINTS WANTS AN ASSISTANT EDITOR.

TO CARRY out our plans for developing PENCIL POINTS, *and also our book publishing program, we wish to employ a young man with the necessary qualifications. He should be well grounded in architecture, preferably a graduate of a good architectural school who has had some actual experience in architect's offices. University education is not necessary. We are looking for the right man and if he is the right man it makes no difference to us whether or not he has a degree.*

Some familiarity with engraving and printing is desirable but not essential. The man we are looking for will have sufficient initiative and gumption to learn the necessary details of editorial work, even though he does not know the difference between a galley and an electrotype.

This position offers no enormous financial return, but does offer extremely interesting work, with a good future for the right person.

Applications will be received from any part of the country. We are looking for a certain man and do not care where he lives or whether or not he has ever seen the Flatiron Building.

More than opportunity is required, of course, for success and more than mere hard work. A man must make the most of his abilities and opportunities, must have a willingness to take more responsibility and show more initiative than is required of him. He must do more than is required if he is to go ahead.

It can be expressed in the little plus (+) sign. More than is required, always. This means that in addition to doing his work in a satisfactory way he should go at least a little beyond this. It also means that he must, in addition to doing his work, devote time and energy to improving his equipment. Most men who stand still do so because there is no plus element in their scheme of things. Energy plus is of the highest importance. Exercise, recreation and amusement have a value that is too often overlooked. As Mr. Harvey W. Corbett said recently at a dinner given in his honor by the members of the Atelier of which he is patron.

"Success is, after all, 40 per cent work and 60 per cent play."

There are plenty of opportunities now to do work that will win recognition and there are plenty of opportunities to study in one's free time. The ateliers in which the program of the Beaux-Arts Institute of Design is followed afford the best of facilities for study evenings and the incidental expenses are small. No young man engaged in architectural work can afford to neglect any of the available facilities for educational development along the lines of his chosen work. Schools, libraries and architectural clubs are valuable aids to men who live where they are accessible. Courses of home study can, naturally, be pursued everywhere.

In PENCIL POINTS we endeavor to reflect, month by month, the life of the drafting rooms throughout the country.

In order to facilitate the mobilization of the architectural forces for this advance movement the publishers of PENCIL POINTS have established, as most of you know, a National Drafting Room Registry and a Free Employment Service. If you have not done so, send for registration card and fill it in. There is no charge. Make use of the employment service, too. PENCIL POINTS is at your service. Here is to the young man who is going ahead!

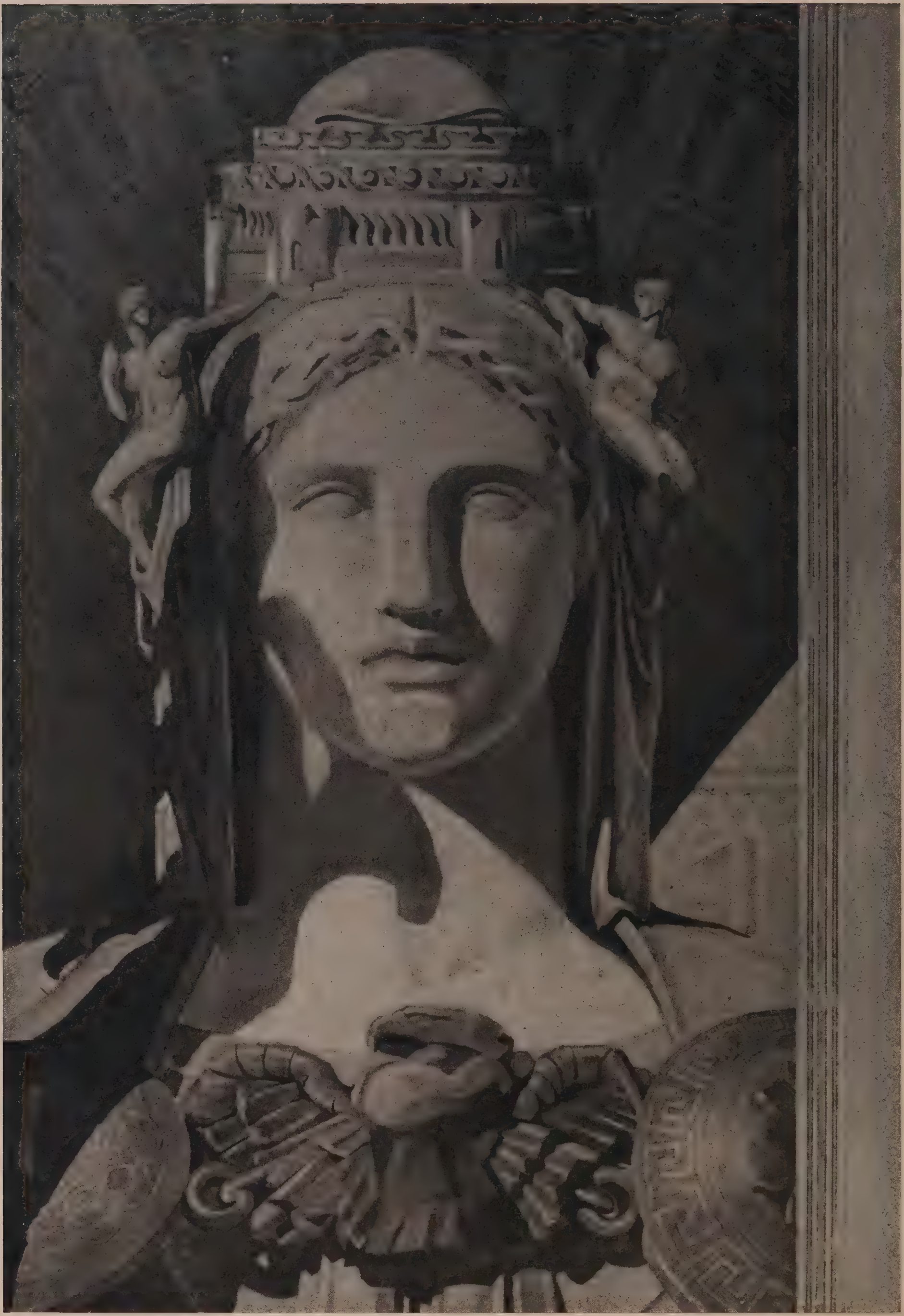


Figure 40. Competitive Design for Kansas City Memorial, Bertram G. Goodhue, Architect. Portion of Detail at the Actual Size of the Original Drawing. Scale ¾ inch 1 ft.

THE TECHNIQUE OF RENDERING, PART VI.

BY FRANCIS S. SWALES

In the serial article of which this is the sixth installment Mr. Swales explains practical methods of rendering. These methods, though based on what may be regarded as standard practice include variants that have been found effective in actual work. In preparing this article Mr. Swales has drawn freely upon the fund of experience he has gained in his architectural work.—Ed.

THE illustration Figure 40 is a portion of the detail of the Kansas City Memorial shown in Figure 39 (February Pencil Points) showing the actual technique by reproduction at the actual size of the original drawing. It must, of course, be kept in mind when comparing an orignal drawing with a printed reproduction, that printer's ink, the screen used in photographing and the little unevennesses of pulp in the magazine paper tend somewhat to crumble lines and surfaces and to slightly intensify the dark parts, especially the lines.

In rendering plans, the line work usually needs to be much stronger than with elevations. A fairly good rule to follow is to draw a firm line with a 2B lead pencil a few inches in length using the edge of the T-Square and your ordinary strength of drawing. It will give about the right width and color for the ink line. It may seem rather dark and "fat". The darkness disappears when the washes are applied and the "fatness" is found to be about right.

The tendency to pernickety over-neatness is rather predominant among the peculiarities of presentation of plans rendered in American offices, and few of such plans impress the writer as possessing the qualities most desirable. A plan to be most effectively presented must be decorative. The drawing as a whole must be pleasing. Unity, consistency of scale and readability must be numbered among its attributes, and conventions which are used to indicate various uses, features, circulations, accents, etc., must be drawn with decision and fearlessness. Generally considered, the parts of a plan are of much greater size than those of elevations or sections, which is one reason why a heavier line and looser drawing may be employed; another is the existence of *poché*. The latter has the most to do with determining the strength of the lines and washes constituting the rendering. Thus if we consider Figures 41 and 42 as being drawn at the same scale the much heavier line for the indication of mosaic and entourage, but as they probably would not be drawn to the same scale, but the smaller plan would be drawn to a much larger scale, it would be more likely that, in practice, the heavier line would be used for the smaller subject. That which is worth observing in the French plans is the freedom and ease with which the artist seems to work. Without any tendency to sloppiness or crudity, there is an avoidance of tightness, over-exactness and all those obvious symptoms of mechanical production so characteristic of practically all American plans. The Frenchman takes just as much trouble as we do to obtain correct and conventional effects, but he does one thing more; he adds a touch of ease and richness by a few strokes which seem accidental or careless but in fact are very carefully considered and deftly added. Note the effect of sunshine among the shadows of the trees in Fig. 41, the touching-up of the mosaic of the terrace, or sidewalk, around the front of Fig. 42, also the manner of defining the extent of the lobbies surrounding the auditorium of the latter figure, by the employment of a wide band forming a border, and at the same time extending the circulation through, at the corners, to the entrances in the angles.

The plan of the McKinley Birthplace Memorial (Fig. 36) by Messrs. McKim, Mead and White, is of a type of rendering that is peculiar to American work. Washes are used to indicate planted beds and borders while the remainder of the work is put in with an air brush. A fine black line—or almost black—is used throughout the plan of the building, except for the floor mosaic, also for the planted borders, etc., in the Central Court. A wider diluted ink line is used to show the paths, borders, etc., surrounding the building.

The plan of the Burke Foundation (Figs. 43 and 44) is made with very fine line work. All of the outlines of trees and the lines of contours of the land are inked-in. The graded washes, of which several have been employed, are all made with a brush. The group of buildings is left white. One very light wash cuts around the paths which follow the perimeter of the buildings but covers the rest of the drawing. The second omits the paths but covers the main roadway. The upper part of the drawing—above the group of main buildings—and the entire space forming a border outside the boundary line of the site is mottled by using an open technique—a lot of little dabs of the brush with spaces between—the wash being heavy enough to cause the pigment to settle to a hard edge. This, however, is softened by the next series of dabs. The mottling is kept clear of the paths.

In the middle part of the drawing, containing the group of buildings, the washes, which are light and slightly toned with yellow, are kept almost flat, that is, with very little grading. Shadows cast by the buildings are kept very light on the walks but are darkened and sharply graded where they fall on the grass. The shadows cast by trees are kept light throughout, but the shades on the trees are made dark with fine touches of the point of the brush. A single touch of color,

(*Continued on Page 73*)

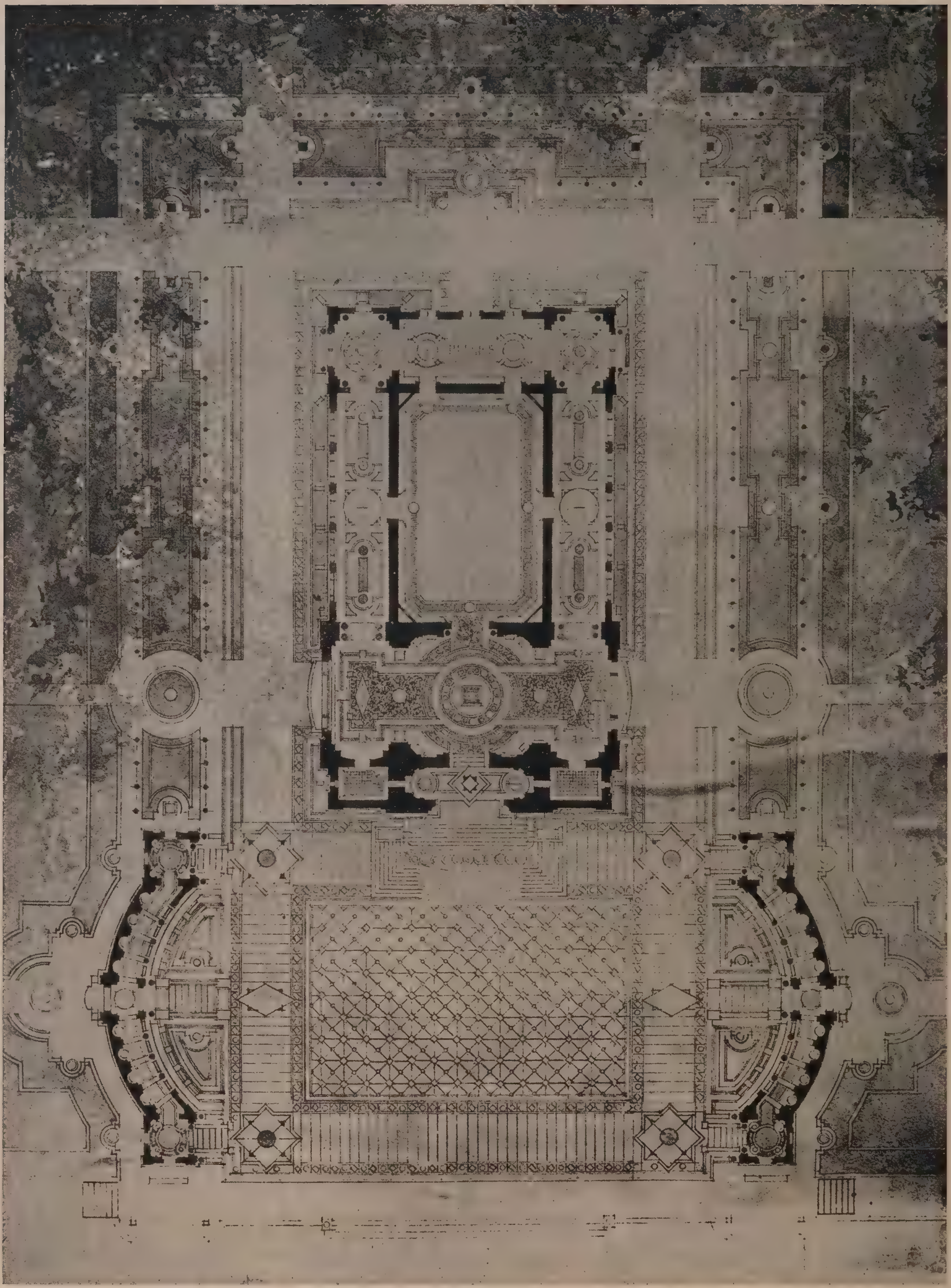


Figure 41. Design by M. Maunoury for "A Small Meuseum," Projet, Ecole des Beaux Arts.

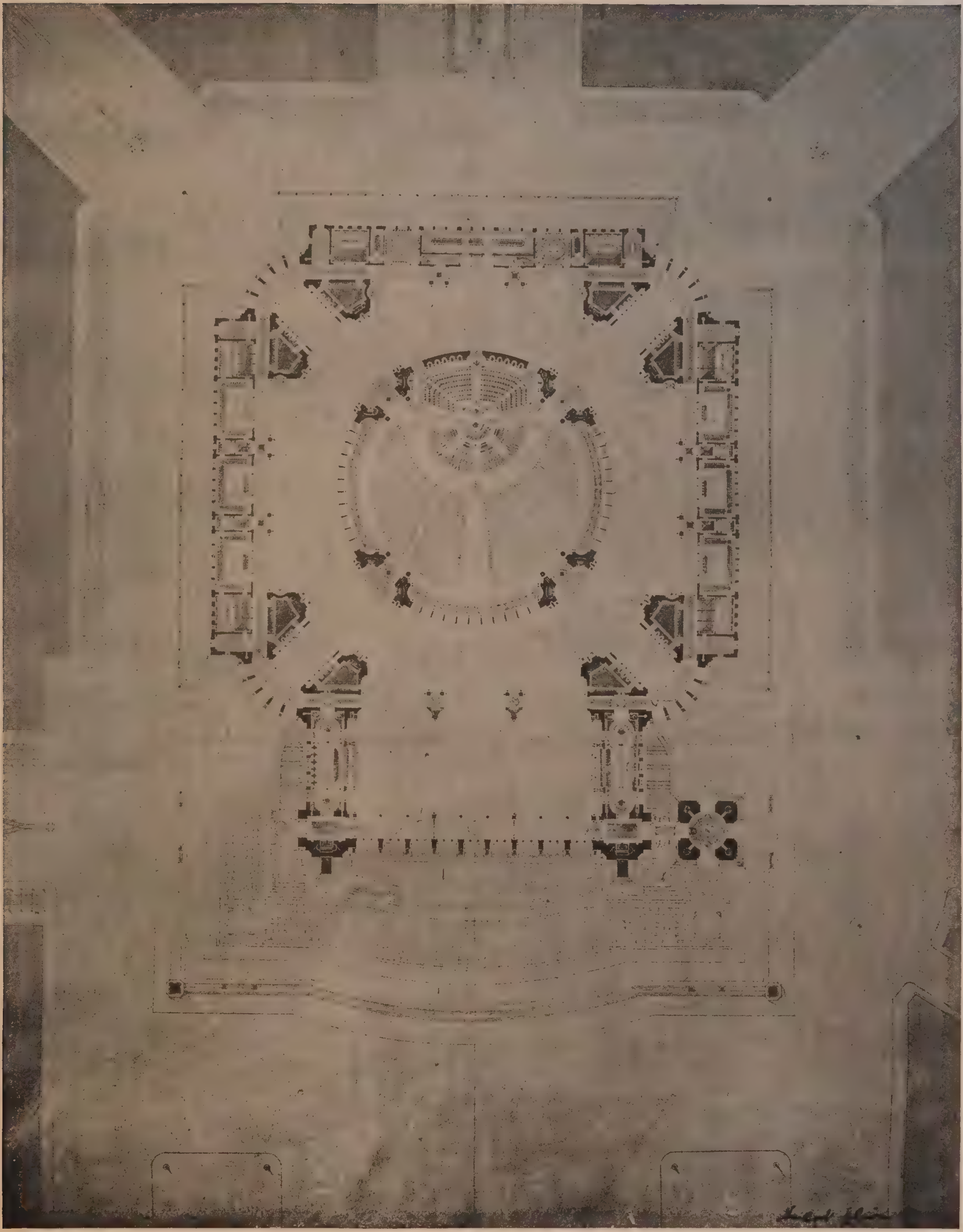


Figure 42. Design by Jean Hulot for "A National Convention Hall," Projet, Ecole des Beaux Arts, Prix Americains.

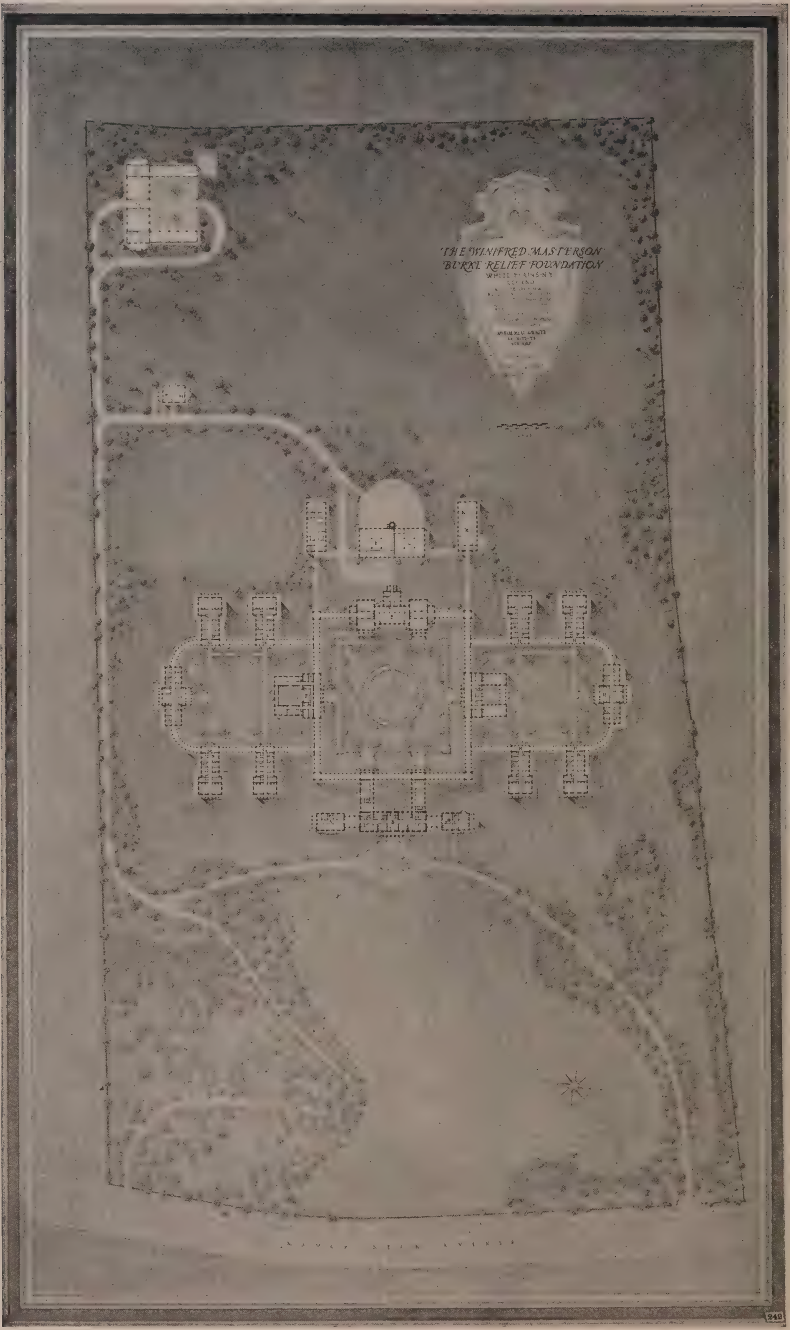


Figure 43. Plan of the Burke Foundation Buildings and Grounds, McKim, Mead & White, Architects.

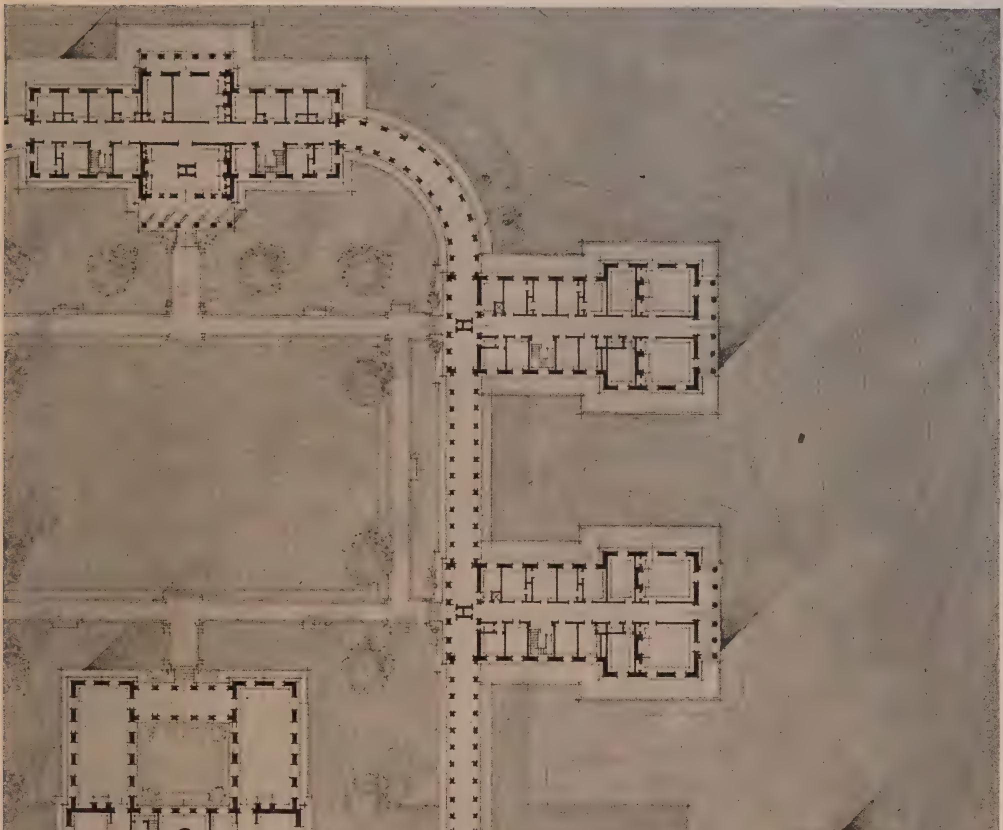


Figure 44. Burke Foundation Buildings and Grounds. A Portion of the Plan Reproduced at Actual Size of the Original Drawing to Show Technique. McKim, Mead & White, Architects.

ARCHITECTURAL HUMANITIES

BY WILLIAM EMERSON

In this article William Emerson, Head of the Department of Architecture of the Massachusetts Institute of Technology, emphasizes the importance of a side of architectural training that is not now sufficiently provided for and gives outline for the presentation of this subject, which he well names "Architectural Humanities." Professor Emerson's expression will be welcomed by other educators who have recognized this need and should give to the student reader an enlarged view of the meaning of the study of architecture.—ED.

THE schools architecture of this country have long recognized that their responsibilities covered a much wider field than that indicated by the teaching of the four or five important subjects in their curricula. No school has even ventured to offer a course in Architecture that did not include the standard essentials in Design, Construction, Drawing, and History. It is, furthermore, now generally recognized that courses in general culture,—Languages, Literature, and the Arts in general, if not essential are of great value, particularly for the student who has come to his professional course without any college background.

Another step now lies before us if we are really to fulfil our obligations to our students. This step, as indeed is true of those previously taken, leads along one of the great highroads of life,—the road to human relations, and for us, students of Architecture, might be entitled "Architectural Humanites." This is by no means a new discovery. Leaders in the profession for a generation have recognized the essential value of such a procedure. When I was a young boy not yet finished college, my father inquired of Mr. Russell Sturgis what sort of an education an architect should receive. Mr. Sturgis' response was unhesitating, even if not very helpful: "Why," he said, "an architect should know more about everything than anyone else." It is a goal that we all may well keep before us, and one that is so impossible of attainment that it is certain to continue as an incentive to further effort throughout the years of our life.

Architectural Humanities is perhaps the closest realization of the comprehensive standard outlined by Mr. Sturgis that any of our schools is likely to offer, but that it should be offered seems to me essential. Consider for a moment the background of many of the students at the Architectural Schools througout the country. They come, perhaps, from small towns or from country localities where the wonder is that they should ever have heard the word architecture, or been fired by it to earn or to save the money, as they often have, to bring them to the foot of the architectural ladder. They have everything in the world to learn,—which indeed is true of every such student arriving at any college. But the study of Architecture demands perhaps more of its votaries than any profession except possibly medicine. It must not only train them as experts; it must also open to them the door to the beauty and culture of the past as well as of the future that is to be theirs. "Without vision the people perish."

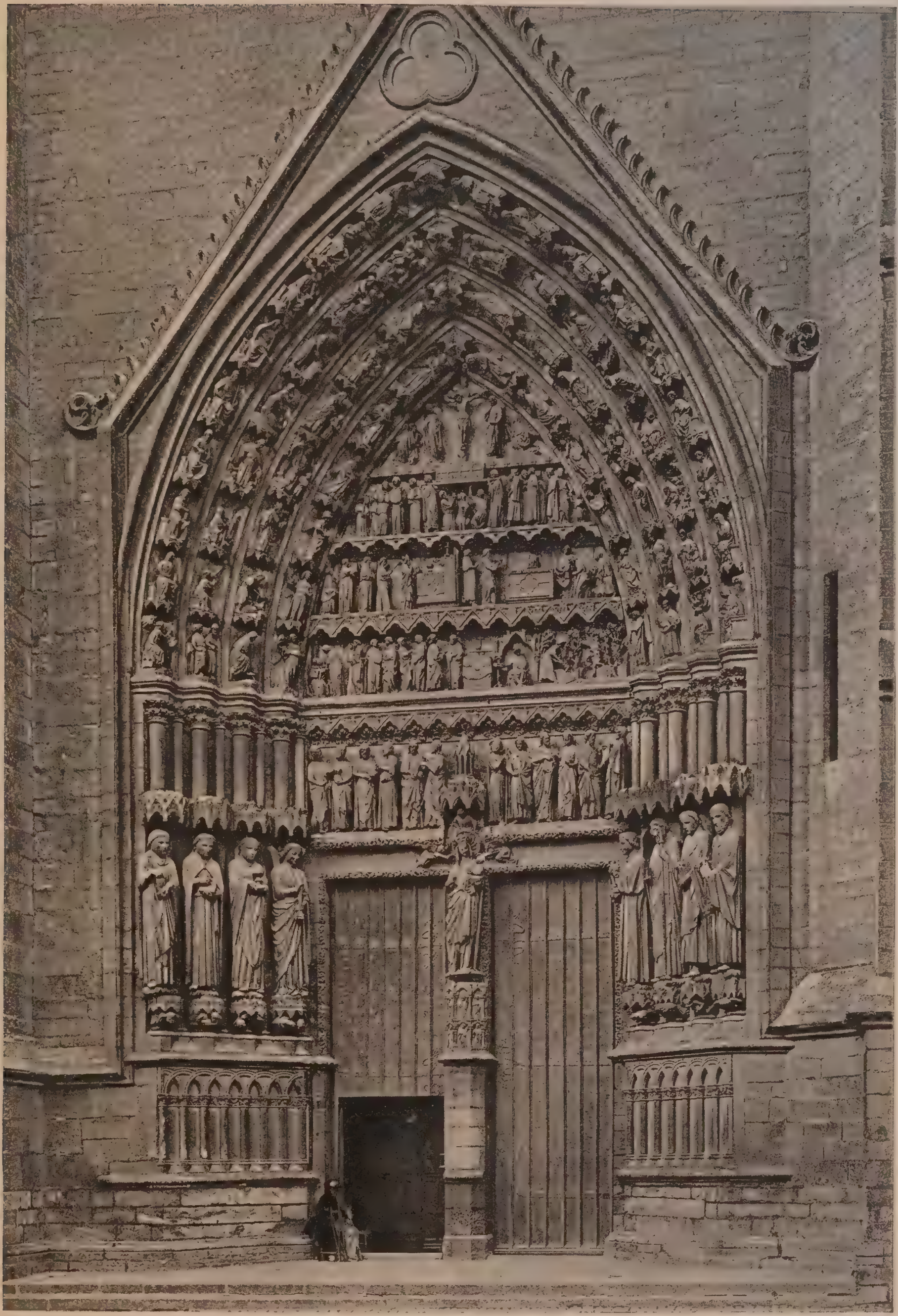
Yet something would still be left undone, and a vital thing too, if an Architectural School left out of consideration or failed to provide for those contacts with the outer world which a practising architect meets in every opportunity that comes to him. And whether the job comes or not, the architect's responsibility to the community is always there. A sense of this coming responsibility should be brought home to every student so that when he graduates he should not only be searching for his first job but for his first chance to serve.

Such a course as this the Department of Architecture at the Massachusetts Institute of Technology has offered its students for the past three years. No one man exists in this day and generation adequately qualified to handle all the contacts that such a course should present, for it is in its very nature human and many-sided, and cannot be reduced to set formulae. Hence each lecture is given by a different man in order that the student's imagination may be stimulated by the personality and accomplishments of his teachers.

These teachers are prefably men whose life work has brought them in contact with architects rather than those whose interests are primarily architectural. Think for a moment of the possibilities that would be opened to the student by remarks on "Civic Opportunities" from the Honorable George McAneny, former Borough President of Manhattan; this man whose helping hand croachments from the sidewalks of our main guided the first steps of New York's present zoning law, whose sound judgment removed enthoroughfares, and began an energetic campaign for the widening of our streets; also recognized the need for better transit facilities, for more muncipal baths, and, in general, showed such a grasp and understanding of the City's needs that his official acts are an inspiration to those who are striving to make our cities better places to live in! Or, again, what value there is to students in a realization of the part that health considerations might properly play in the planning of buildings, plants, communities, let alone those smaller details that effect one's daily life, such as could be derived from a talk by Dr. Haven Emerson, former Commissioner of Health of New York City.

Similarly, William A. Starret, architect, engineer, and builder, from varied experience in these three great activities, can tell a story and point

(*Continued on Page* 84)



AMIENS CATHEDRAL, DETAIL OF PORTAL

FROM "SELECTED MONUMENTS OF FRENCH GOTHIC ARCHITECTURE"

One of the most beautiful of Gothic portals is that shown in the photograph reproduced on the other side of this sheet, the portal of the Virgin in the north transept of Amiens Cathedral. This plate is from the book soon to be issued by the publishers of PENCIL POINTS *under the title "Selected Monuments of French Gothic Architecture." The plates of this work are drawn from the archives of the French Commission of Historic Monuments.*

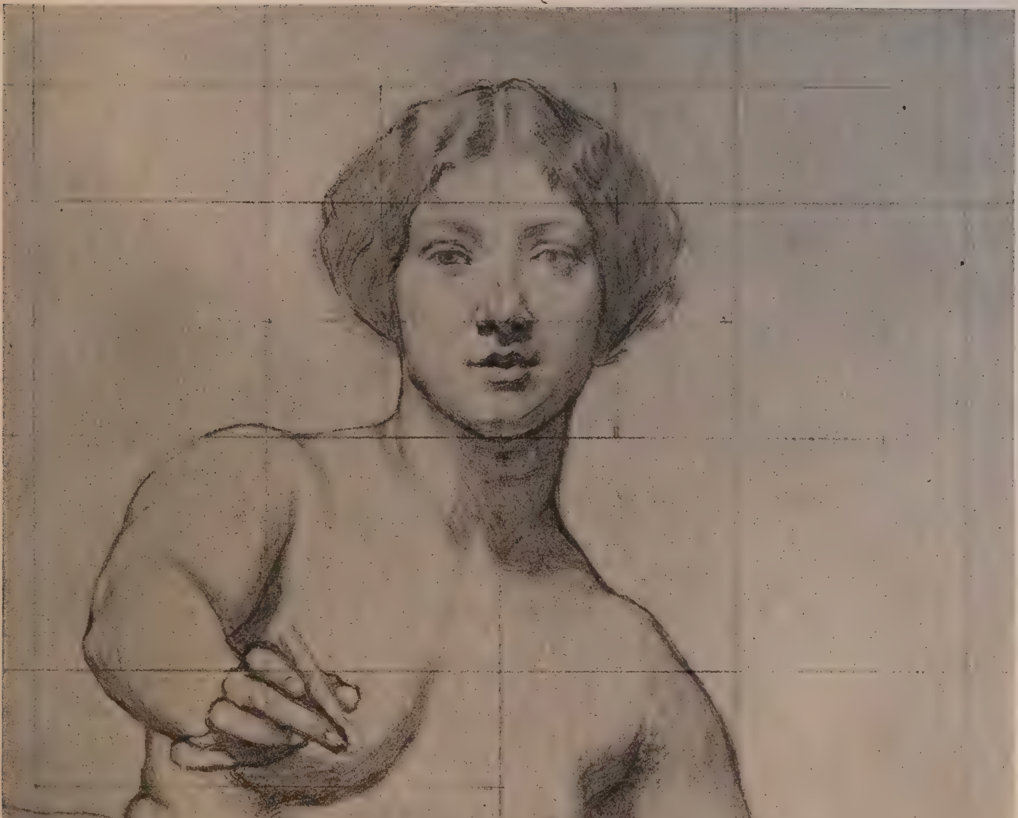
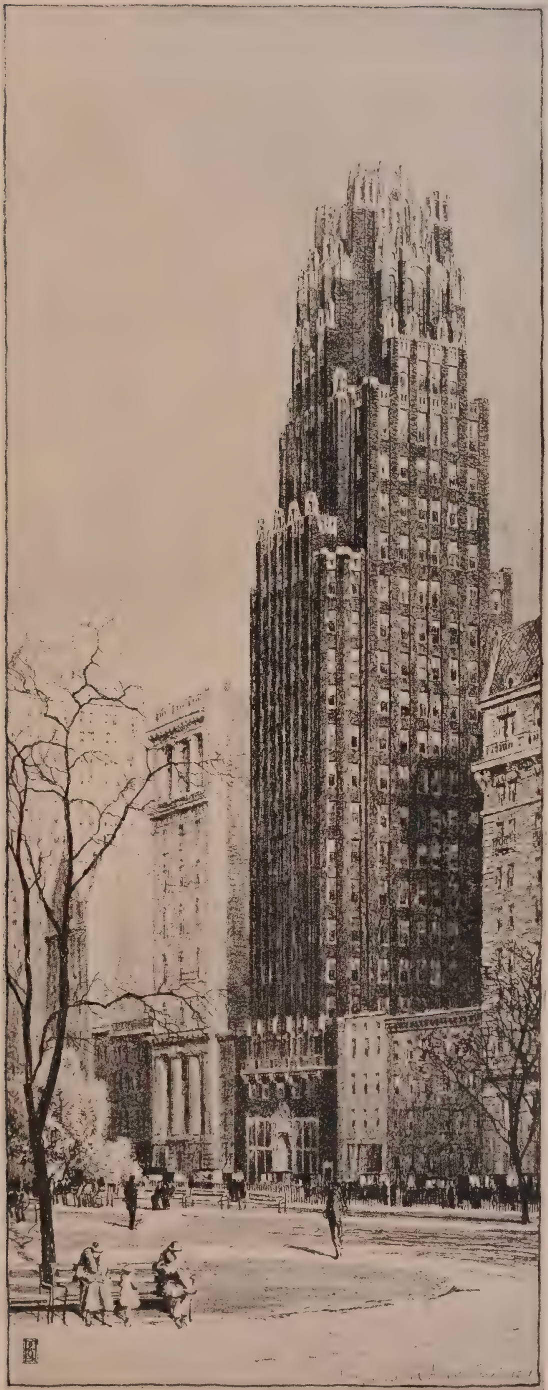


FIGURE DRAWING BY KENYON COX

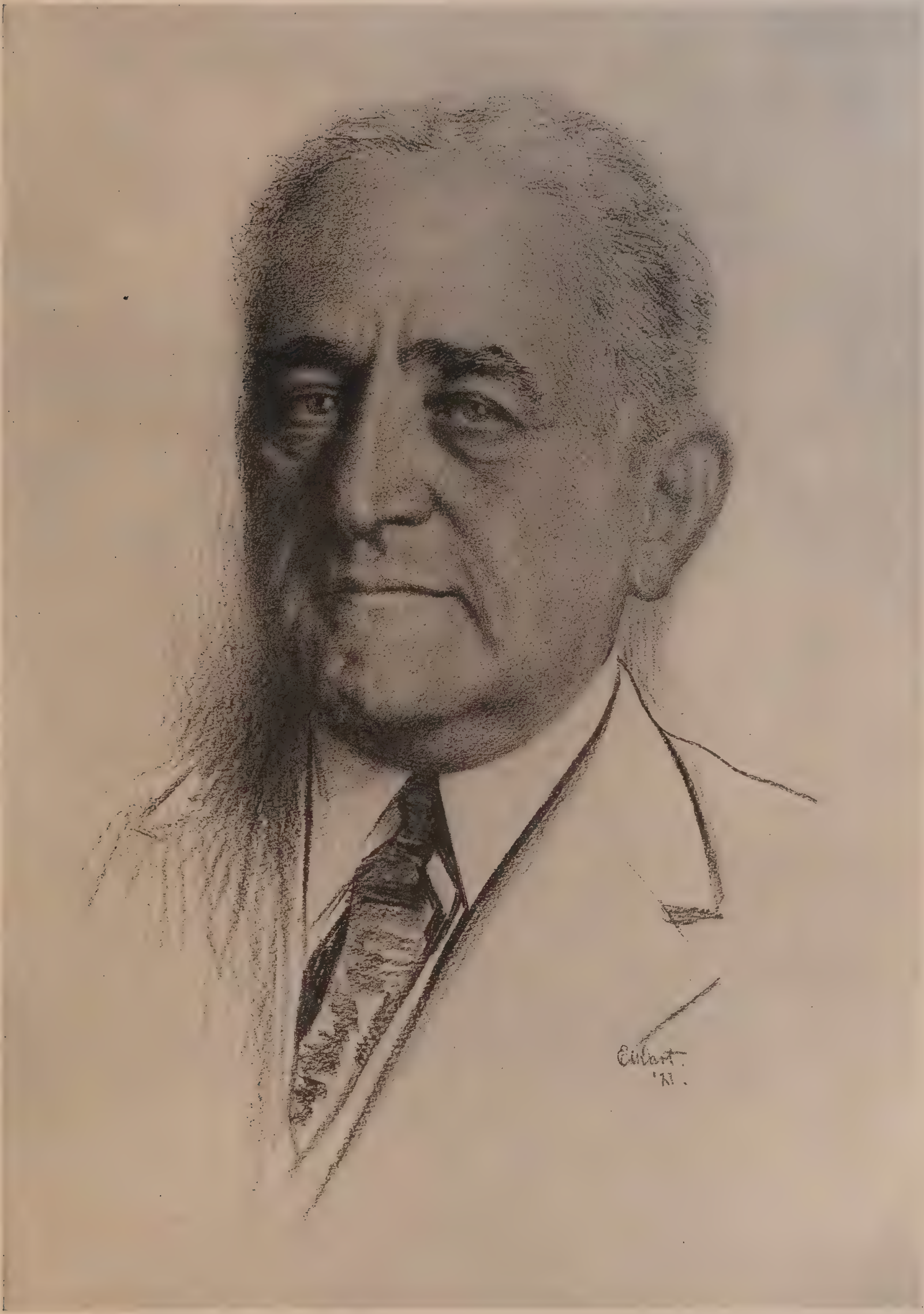
Detail reproduced at exact size of original drawing.

Of special interest, because it shows the pencil technique of the late Kenyon Cox at the exact size of the original drawing, is the detail of a figure study reproduced on the other side of this sheet. This and the other drawings by this artist reproduced from time to time in the pages of this journal are shown here through the courtesy of Mrs. Cox.



RENDERING BY BIRCH BURDETTE LONG, BUILDING FOR THE AMERICAN RADIATOR COMPANY, RAYMOND M. HOOD ARCHITECT.

The rendering by Birch Burdette Long reproduced on the other side of this sheet shows a building that marks a departure from the common practice in the matter of color. The windows of most office buildings form regularly spaced black spots that tend to ugliness. This difficulty has been overcome by the architect, Raymond M. Hood, in the case of the American Radiator Company's Building by making the wall surfaces of black brick. Stone of a golden yellow is used for accent. It is a bold and logical solution of the problem.



DRAWING IN RED CHALK BY E. N. DART. PORTRAIT OF ADOLPH S. OCHS.

A remarkably faithful portrait that is an example of skilful technique is the drawing in red chalk by E. N. Dart, of Adolph S. Ochs, publisher of the New York Times, which is reproduced on the other side of this sheet. The original drawing being in red on a paper of yellow tint can not be reproduced in black-and-white without altering the relative values to some extent, for even a faithful translation lacking the color has not the same effect as the original. The technique has been presented here with care, however.

THE SKETCH PROBLEM, PART IV

The Second Preliminary Competition for the Paris Prize

BY JOHN F. HARBESON

In this article Mr. Harbeson treats the sketch problem in the same manner in which he has discussed other problems in the pages of this journal under the general heading "The Study of Architectural Design."

THE final competition for the Paris Prize is the most important educational competition of this country; the test by which one may measure his attainment in academic training, his knowledge of the theory of design, and skill in the presentation of this knowledge.

It is seldom in actual practice that problems arise that can equal in magnitude or difficuty such problems as are given for the Paris Prize. (See Fig. 163, PENCIL POINTS, 1922; Figs. 1, 2, 3 and 4 PENCIL POINTS, June, 1923.) Once in a while such a program as that for the "Hudson Fulton Memorial" in New York (Figs. 31 and 32) or the recent competition for a War Memorial in Kansas City (Figs. 33 and 34), or Mr. Cass Gilbert's plan for an Art Museum for St. Louis (Fig. 35) permit opportunities for an equal breadth of vision, fertitlity of imagination and ingenuity in arrangement. In the large competitions vast sums of money are spent to present the schemes as well as it is possible to present them; but they are judged on a "parti," it is the *parti* that *is all important.*

To enter the Paris Prize competition one must first pass the "Second Preliminary," and this "preliminary" is itself a competiton on a big scale —it is the biggest academic *sketch* problem given in this country; and here too the *parti is all-important.* This cannot be too strongly emphasized. Many times the best presented drawings have the most satisfactory parti. But this is not always the case. Of the successful drawings in the second preliminary competition for the 16th Paris Prize —A Summer Hotel—cleverness in presentation is more evident in those placed at the end of the group, Figs. 36 and 37, than those first chosen for admission. The drawing placed first in the preliminary competition for the 12th Paris Prize was also very simply presented, Fig. 38, while that placed fourth, Fig. 39, is much more elaborate and finished as presentation. It was a question of soundness of parti. Success in this competition depends first of all on one's ability to find a scheme for a program. It is for this reason that I suggested in my article in January PENCIL POINTS, that you "go into training" for this competition, taking a number of such problems, say one every two weeks. This is an excellent training in "parti." For the same reason it is well for the Class A man to work out a parti for every program—Class A or Class B—that is given out in the atelier whether it is one that you may send as an esquisse and may work up as a regular problem or not—simply as an exercise in the finding of a parti. Looking at the published work after the judgment will have an added interest to you if you have done so and be a greater stimulant in your development.

A man's ability to find a parti depends on the length and intensity of his training, on his experience, just as much as does his ability at presentation—his knowledge of technique; the better one

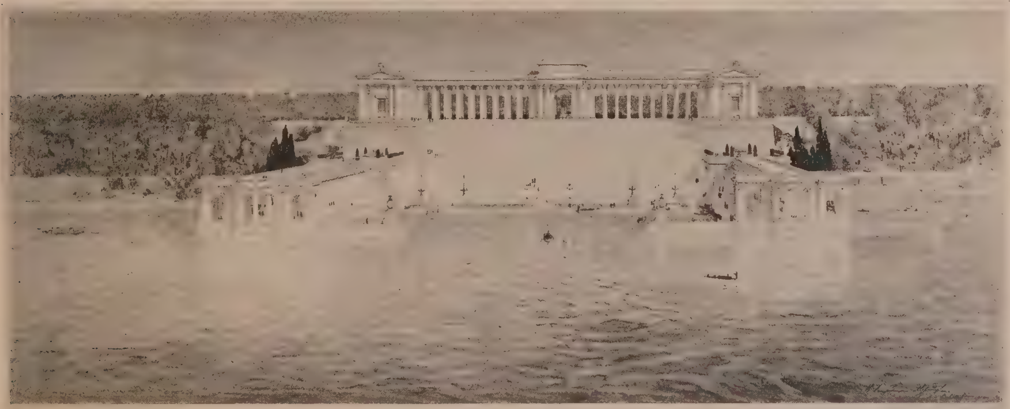


Figure 31. *Winning Design by H. Van Buren Magonigle, Competition for Robert Fulton Memorial, New York City. Rendering by Birch Burdette Long.*

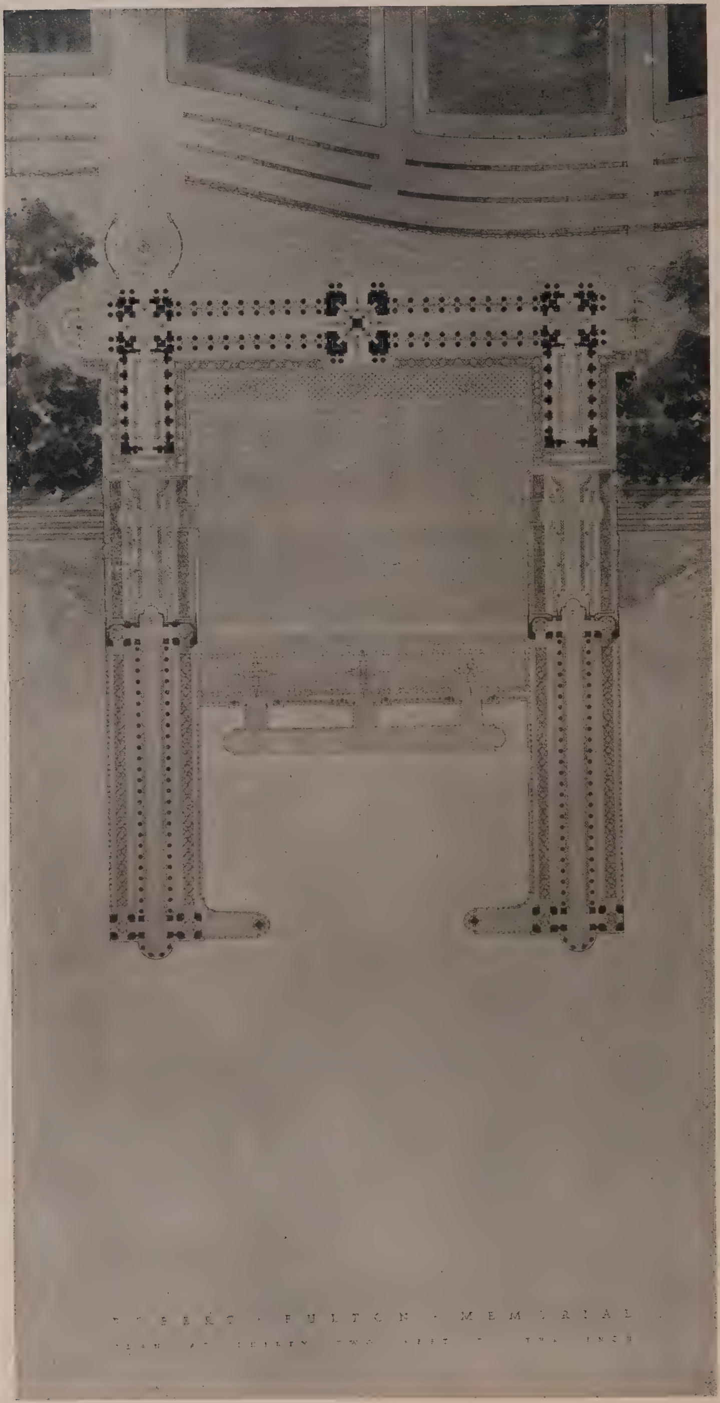

ROBERT · FULTON · MEMORIAL
PLAN AT THIRTY TWO FEET TO THE INCH

Figure 32. Plan of Winning Design by H. Van Buren Magonigle, Competition for Robert Fulton Memorial, New York City.

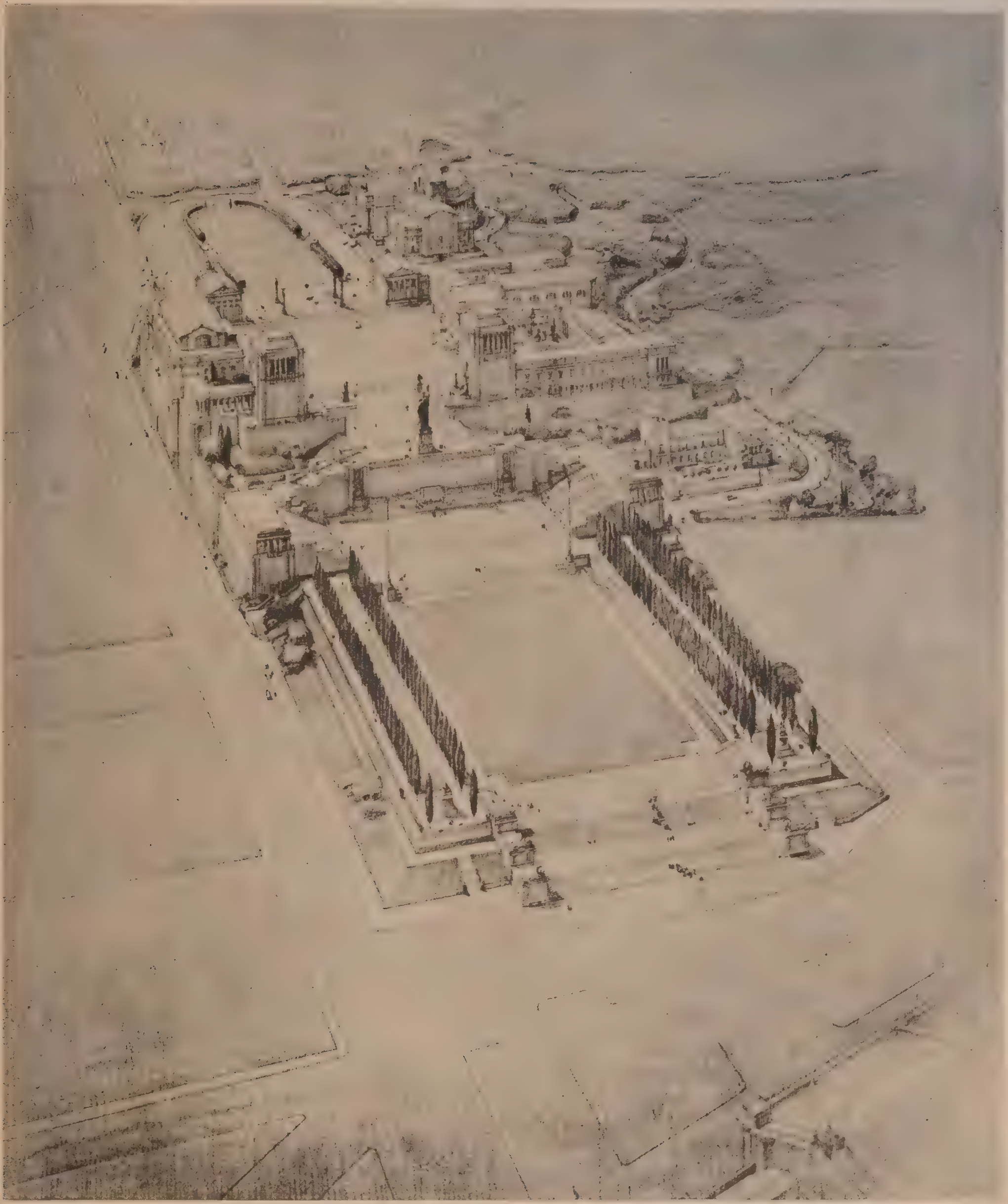


Figure 33. Design by Paul P. Cret and Zantzinger, Borie and Medary, Competition for Kansas City War Memorial.

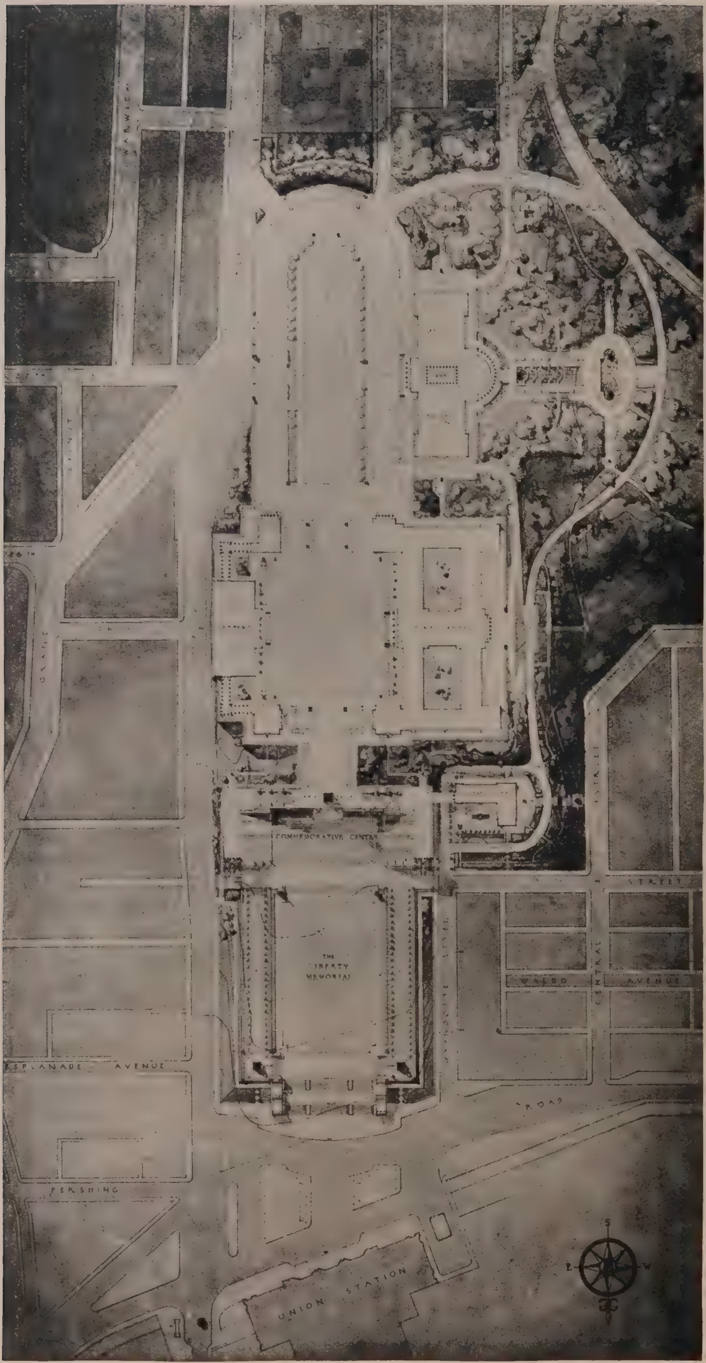


Figure 34. Plan of Design by Paul P. Cret and Zantzinger, Borie and Medary, Competition for Kansas City War Memorial.

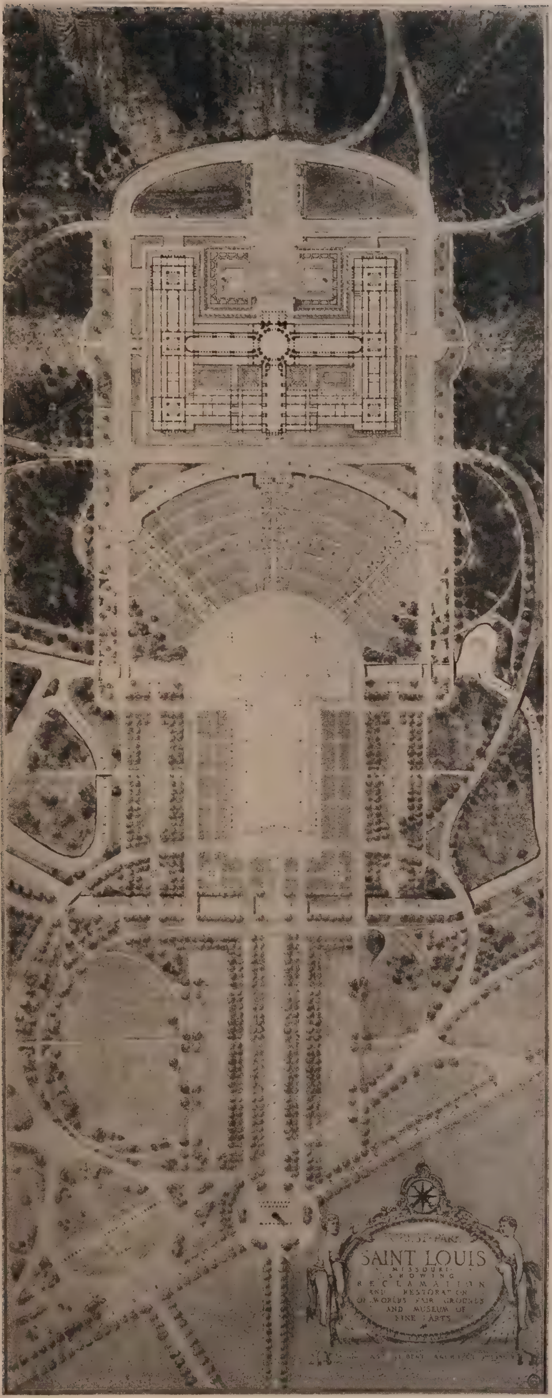


Figure 35. Plan of Reclamation and Restoration of World's Fair Grounds and Museum of Fine Arts, St. Louis. Cass Gilbert, Architect.

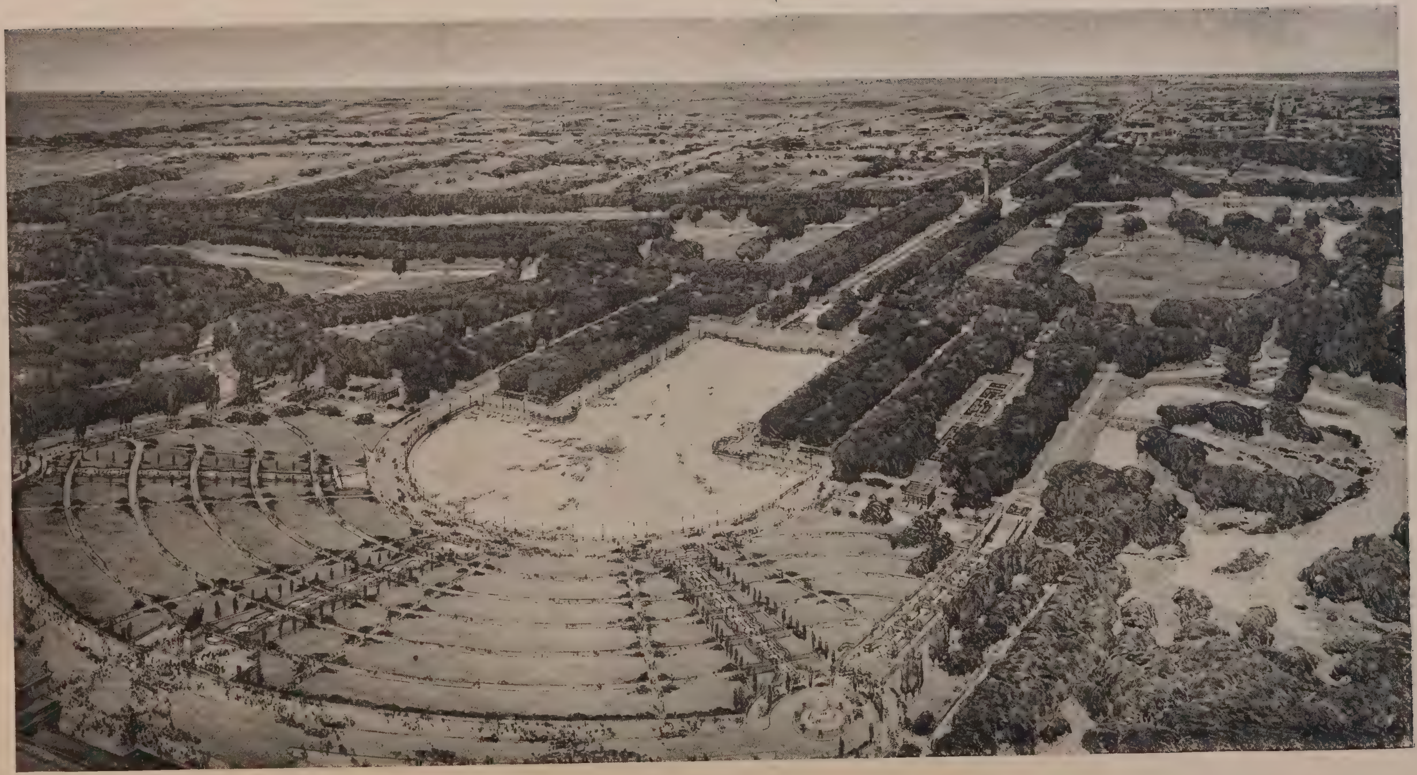


Figure 35A. Birds Eye View of Reclamation and Restoration of World's Fair Grounds and Museum of Fine Arts, St. Louis, Cass Gilbert, Architect.

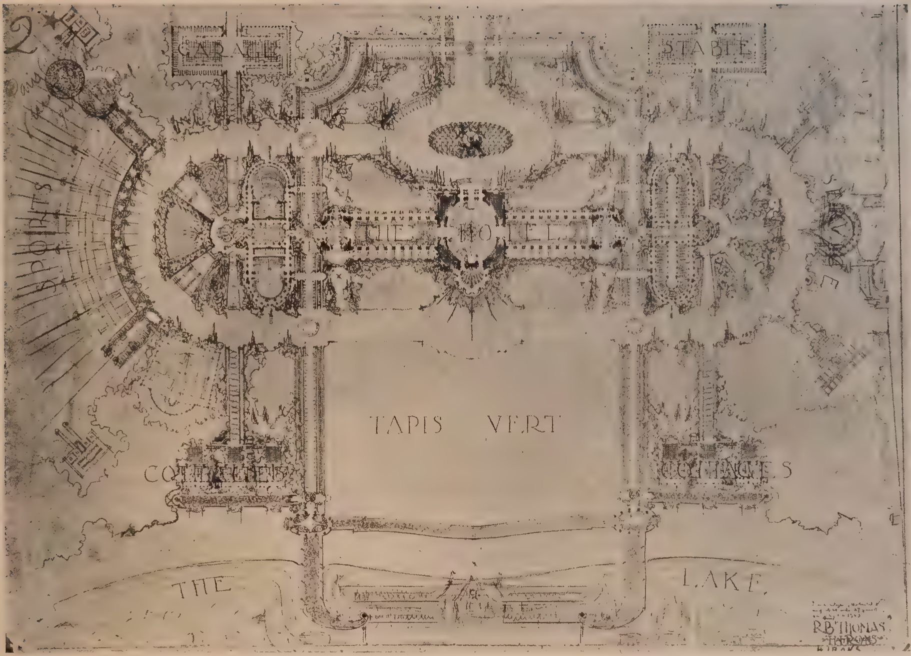


Figure 36. Design by R. B. Thomas for "A Summer Hotel." Beaux-Arts Institute of Design, Second Preliminary Competition for Sixteenth Paris Prize.

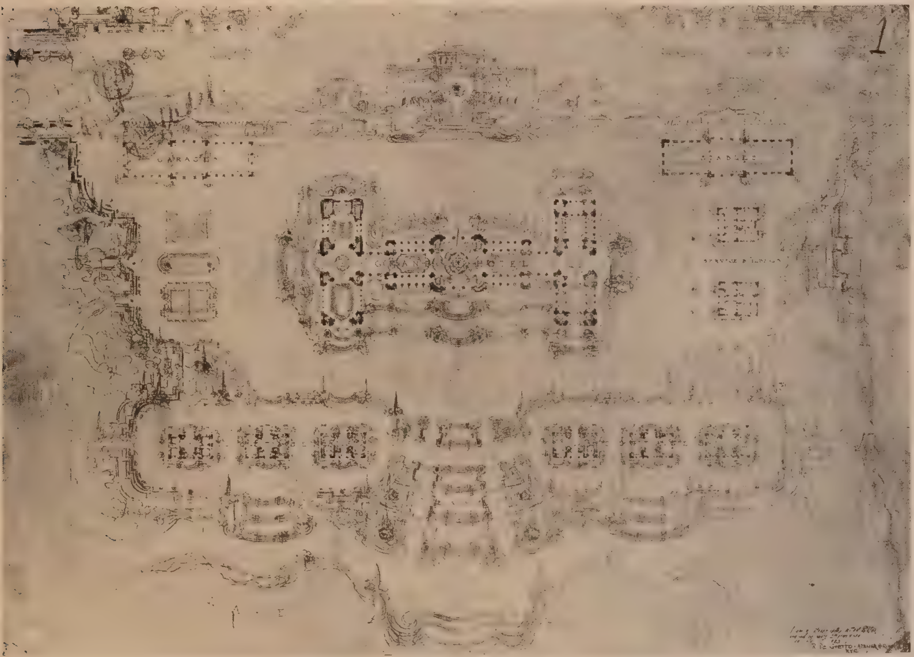


Figure 37. Design by R. DeGhetto for "A Summer Hotel." Beaux-Arts Institute of Design, Second Preliminary Competition for Sixteenth Paris Prize.

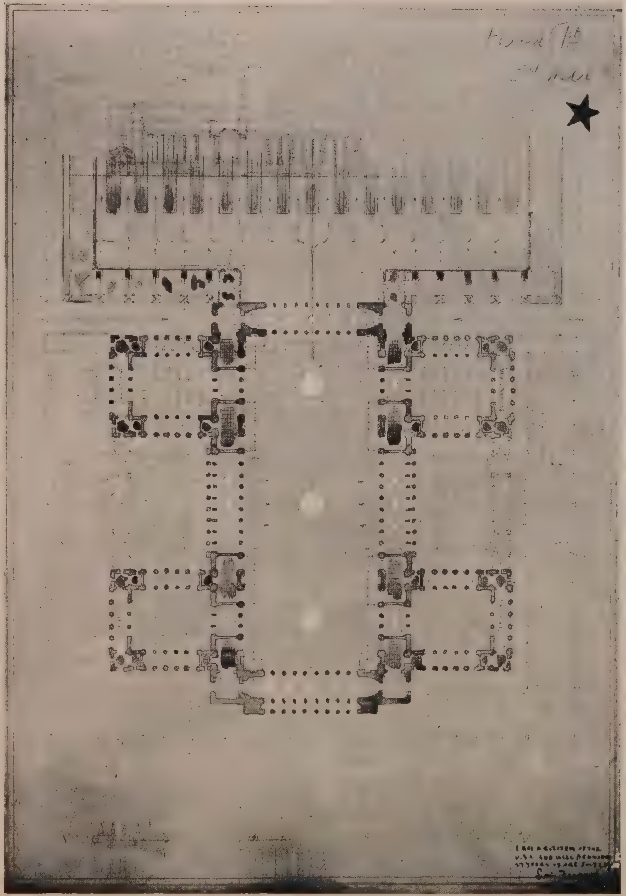


Figure 38. Design by L. Fentnor for "A Terminal Railroad Station," Beaux-Arts Institute of Design, Second Preliminary Competition for the Twelfth Paris Prize.

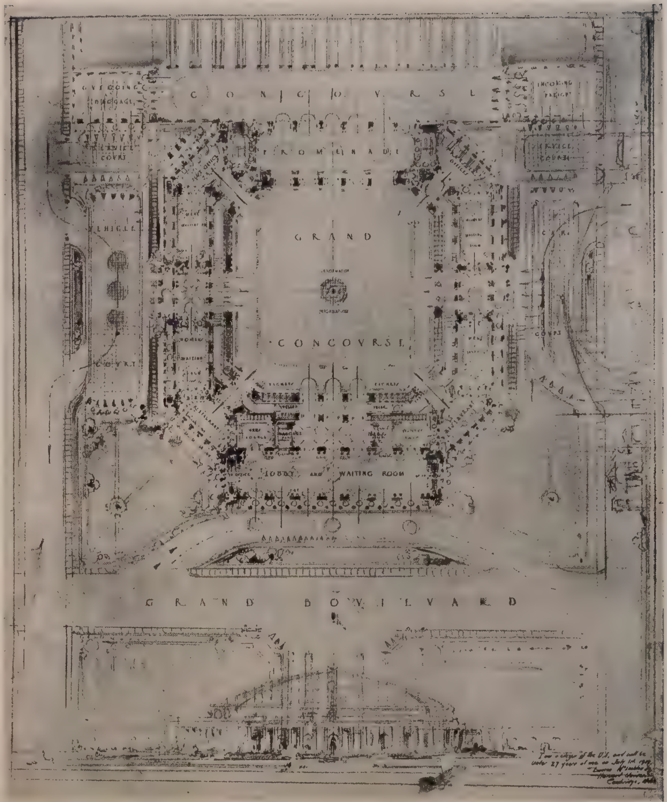


Figure 39. Design by D. McLachlan, Jr., for "A Terminal Railroad Station," Beaux-Arts Institute of Design, Second Preliminary Competition for the Twelfth Paris Prize.

is prepared, the more experience he has had, the better will he be able to acquit himself in this competition.

It is interesting to study the five drawings placed in the 13th competiton, shown in Figs. 40-44, after reading program.

Program.

Second Preliminary Competition for the 13th Paris Prize of the Society of Beaux-Arts Architects. Program: The Annual Committee on the Paris Prize proposes as subject of this competition "A Sailors' Y. M. C. A. at Manila." Introduction: The entertainment of soldiers and sailors while on leave has been, during and since the war, the subject of a great deal of study and consideration by various societies and organizations. The Y. M. C. A., in continuing this work, wishes to establish at Manila a recreation center for the sailors from the visiting war-ships and the naval bases located there.

The climate is sub-tropical. It is desirable, therefore, that the plan be conceived in such fashion as to provide adequate shelter from the sun, and to allow the free passage to the breeze, securing in this manner, the greatest protection and comfort to those who are pursuing the various activities provided for them.

The Problem: The ground to be occupied by this recreation center is on the harbor, easily accessible to the ships at anchor by means of launches and other small boats, and to the naval base by a boulevard which runs parallel to the shore front. It is rectangular in shape, and its greatest dimension must not exceed 600 feet.

Provision is to be made for the following departments:

1. Athletics: vestibule with stairways; physical director's room and examination rooms; the gymnasium of not over 8,000 sq. ft. area. with running track and spectators' gallery; a swimming pool not over 4,000 sq. ft. in area, with showers, baths, drying rooms, lockers, toilets and a barber shop; squash and hand ball courts. There should be provided out-of-door space for tennis, basket-ball and other minor sports. Baseball and football fields will be outside the grounds.

2. Education and Administration: An auditorium for lectures, concerts and moving pictures to seat 500 persons. A library. Four or five classrooms. A laboratory for general scientific education. The offices for general administration including central office and several secretaries' offices.

3. Social and Residence: Entrance lobby. Social hall. Billiard room (8 or 10 tables). Several small club rooms and card rooms. Outdoor rest rooms or porches over-looking the bay. Cafeteria for about 300, with serving pantry. (The kitchen and store rooms may be in the basement.) Dormitories for 200 men on the floor above.

But in a big plan sketch problem this parti must be found quickly; presenting the scheme will require three-fourths of the time allotted. Once having chosen your scheme your problem is to get your solution "across" to a jury—in a given time.

You must study the problem (as distinct from the more mechanical presenting of the scheme you have studied) long enough to understand it. You should study with a pencil after the first two readings of the program. Make the early studies of a group plan simply, in block form, with a bit of charcoal. Work things freely in your mind and on paper before thinking at all of detail. Work out your scheme at small scale, grouped the way the whole thing is to look, in *the limits of the final sheet,* marked and laid out at this small scale. Block the buildings in; study the entourage and gardens. Now take tracing paper and pencil, and sketch in the poché and develop in pencil the idea and composition you have laid out in charcoal.

What it is necessary to "present," is your idea—the whole thing—but you do not need detail; such detail as you do put into your drawing must look like something. The individual lines may not mean anything; but they must together, convey a meaning; the drawing should be made to look at first glance like a finished problem. The simple mechanical difficulties of presentation are large; there is a lot of work to put on paper in a short time. You cannot take the time to study your scheme at several different scales.

You have put your scheme at small scale on paper, indicated as well as possible the way the whole thing is to look, with the entourage, etc.—the complete effect. Put this at an upper corner of your board, and jump right up to final scale, and go at it with the charcoal again. Put a drawn scale somewhere on your paper; you must take every method you can to eliminate useless work to save valuable time; a visual scale can be referred to constantly by eye to gauge sizes.

Draw the axis lines first, then block in the masses in charcoal, enlarging everything from your small scale drawing up in the corner. In going up to the final scale do not lose the proportions that were studied at small scale. Then you have the solution at scale, and "composed" (if it was composed on the small sketch, which of course should be the case). After this it is simply a matter of drawing and indication. A man who has trained as I have outlined by taking several similar problems in succession, will now know how long it will take him to get his idea over on the final paper—whether he transfers with carbon paper or transfers by rubbing—and then rendered and presented in time, starting with this charcoal sketch of the big lines.

Now make studies in pencil on tracing paper over the charcoal study (there will be time for only one or two before the final); use the rubber freely, when something does not work out, make another try at that point. First sketch in the big poché, and the big circulations, inside and outside, freehand. Carry this study as far you can, then make one more over this, a little more carefully, but still with a great use of freehand, and then you will be ready to transfer to the final cardboard. It is in these studies that you must try to express the "character" of the problem; of the different portions of the problem. We have spoken of character in plan (PENCIL POINTS for February, 1922). There are certain types of buildings to which academic traditions have given certain kinds of indication. There are certain types of site that in the same way have acquired a distinctive indication. They are all in "the books"—can all be studied. If you look at various "art gallery" problems of different sizes and kinds in academic work you will see

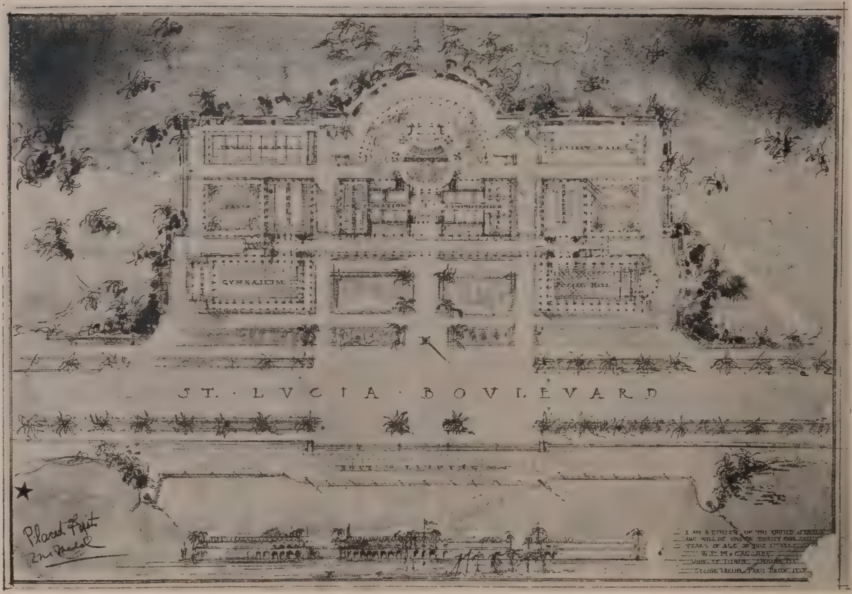


Figure 40. Design by W. F. McCaughey, Jr., Beaux-Arts Institute of Design, Second Preliminary Competition for the Thirteenth Paris Prize.

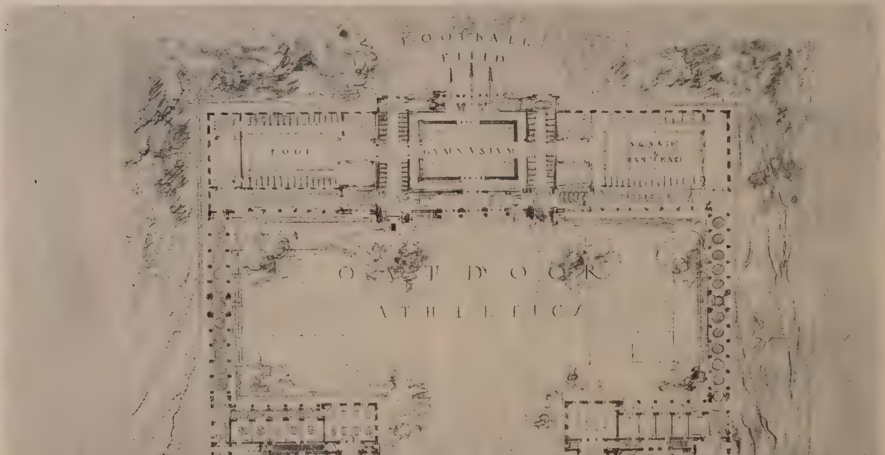


Figure 41. Design by D. McLachlan, Jr. Beaux-Arts Institute of Design, Second Preliminary Competition for the Thirteenth Paris Prize.

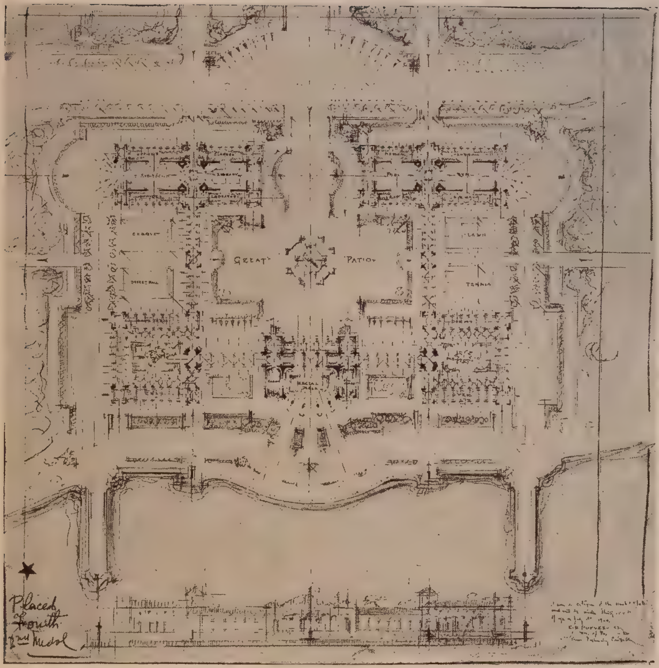


Figure 43. Drawn by E. R. Purves. Beaux-Arts Institute of Design, Second Preliminary Competition for the Thirteenth Paris Prize.

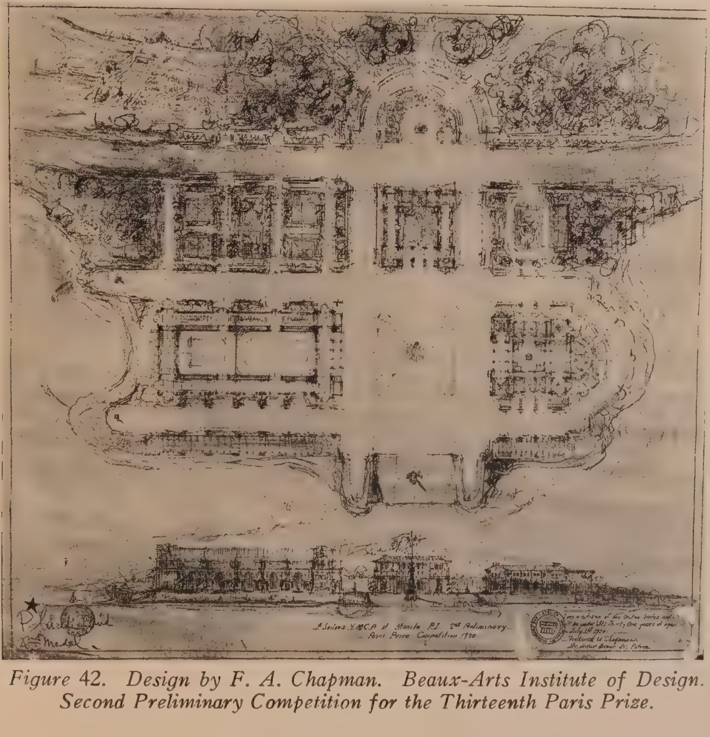

A Series Y.M.C.A. at Manila P.I. 2nd Preliminary.
Paris Prize Competition 1920

Figure 42. Design by F. A. Chapman. Beaux-Arts Institute of Design. Second Preliminary Competition for the Thirteenth Paris Prize.

a similarity in expression—a use in each of some of the same forms. It is the same with government buildings—with all the different "types" of buildings, in fact. In the few days before doing a sketch problem of this sort, look through the books and get as many of these things as possible in your head. There is no time to stop or correct now. You must use all your time and speed in getting your ideas down, and then in rendering to bring them out.

When you have made this second study in pencil, and carried it as far as possible, you are ready to transfer. This transferring is not—should not be—tracing—it is in reality another study, and you must do a certain amount of designing right on the final. The aim is to eliminate work and get ahead—to get your drawing of your solution completed in the time given. If it is only two-thirds completed—no matter how well this two-thirds is drawn, you have not given your idea a fair showing before the jury.

Do not be afraid of putting too many lines on the final—you can always lose some of them in rendering if necessary. The lines you want to count are the important ones, but they require many others to make them look well; too few lines leave a sketch problem looking empty—you can't put an idea across if your drawing is incomplete. At the same time, do not scratch in a whole lot of lines that look like nothing. When you do have to "pad" pad within lines that look like something.

After getting the big lines on your big study, it is best to work freehand on most of the remainder—it is much easier and much quicker than working with T-square and triangle. As long as the main lines are straight, you can transfer the rest just as well freehand, and with freehand you will be much better able to get the "character" in your plan—both the general character and the character of the small spots.

For you must get character in your plan* to get the idea across—there is a very different expression for a school, for instance (Fig. 131 PENCIL POINTS February, 1922) and a concert hall (Figs. 29 and 30, PENCIL POINTS February, 1924). Each type of building has a character of its own, (we are speaking of plan now). It takes some training to be able to recognize this character, some experience to be able to give it to a plan. But the attempt must be made—you should know what kind of detail to use in the different kinds of buildings—having a command of such details of poché, of spots, corners, niches, etc., saves you much time. You can go twice as fast in drawing your idea, if you *know* how corridors turn, different ways to treat central spots, etc., because you won't have to stop your thought on the problem in general to work out these minor matters.

You can work up a vocabulary of such forms by going through two or three volumes of the "Concours d'Ecole" (des Beaux Arts) studying the published sketch problems with a notebook in hand jotting down different ideas. Putting it in a notebook is primarily to fasten it the better in your mind, though it is of value also to have such a book to look through the night before the second preliminary program is given out.

It goes without saying, for the reasons above, that the poché should not all be of the same thickness—any more than in a projet; in fact in a sketch problem the differences in poché should be still more accentuated.

After you take up your transfer paper, your drawing looks like an inarticulate mass of lines—with your rendering you will bring out your idea—following for the general scheme your small scale sketch in the corner of your board. If you need a "white" rub out or rub down some of the lines. If your first washes show a "white" too large or small, make it wider, or narrower, by the next wash—but your rendering should be simple—just enough to express the idea. A lot of the actual drawing can be done for the first time on the final drawing (i.e., need not have been laid out on the study and transferred); do a lot with the freehand pen on the final drawing. Try to get the whole thing down on the final sheet, and rendered, and still have time to get away from it and look at it, to see if there is something more needed to get it "across"; to make other men see your idea as you see it. And this is very much like cartooning; to get a likeness it isn't always necessary to put everything down, but what is put down should be what will be a "portrait" of your "parti."

The question of "mosaic," of the filling in of a plan, is important. What shall we use as mosaic? The purpose of an esquisse-esquisse is to make *your* thought clear to some other people. The purpose of mosaic is to help make your idea clear. With poché alone, it would be difficult to explain the purpose of a certain room; mosaic shows without words the use of the room. It is *not an ornament*, but a means of explaining a scheme. It is closely allied to the theory of poché, of course; for instance, a stable and a greenhouse may be of the same size, but the greenhouse will have as poché just "points," with glass between, while the stable will have continuous walls with a few windows, and as "mosaic" some small divisions—the stalls.

In the same way a number of different rooms—which may all be rectangular in shape—may be identified by their mosaic. For a "salle des fêtes," or a ballroom, the typical expression is to show no "furniture" but to indicate the ceiling—usually an elaborate thing with vaults in penetrations, with highly decorated plaster work; this could never be mistaken for a library or a stable. A laboratory—which may be another rectangular room, will be expressed not by a ceiling, and with

(*Continued on Page* 73)

See article "Character in Plan" in PENCIL POINTS *for February,* 1922.

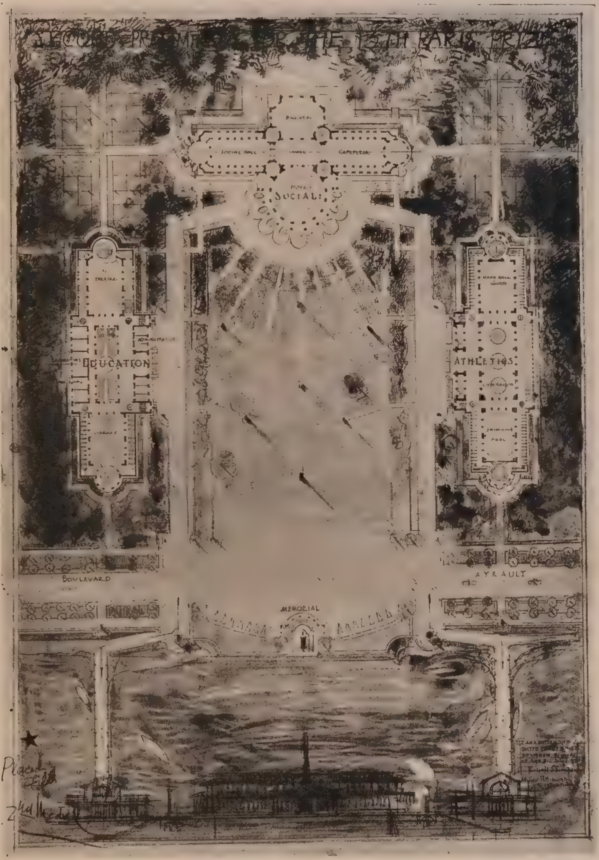
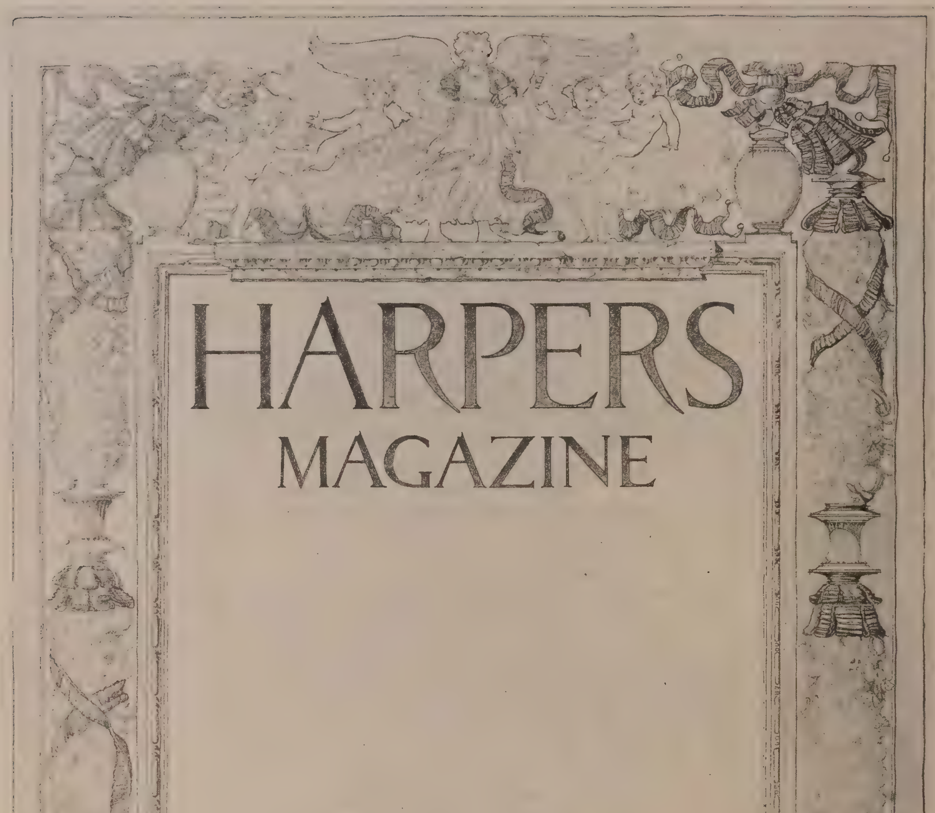


Figure 44. Design by Paul Simpson. Beaux-Arts Institute of Design, Second Preliminary Competition for the Thirteenth Paris Prize.



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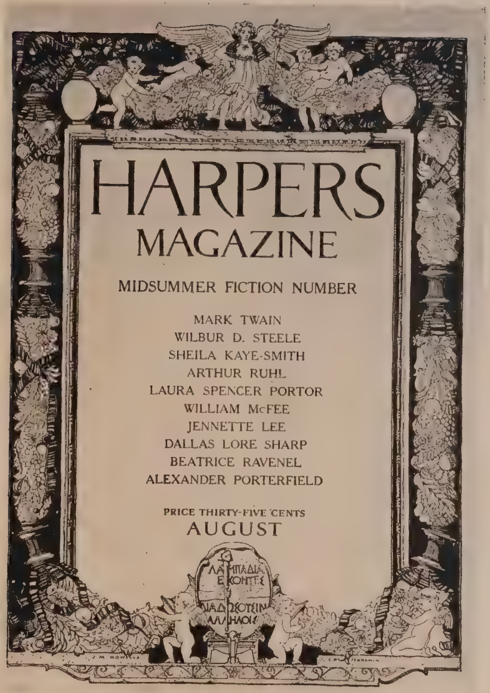
Pencil Drawing by John Mead Howells of Design for Cover of Harper's Magazine.
(See other illustrations on opposite page.)



HARPERS
MAGAZINE

MIDSUMMER FICTION NUMBER

MARK TWAIN
WILBUR D. STEELE
SHEILA KAYE-SMITH
ARTHUR RUHL
LAURA SPENCER PORTOR
WILLIAM McFEE
JENNETTE LEE
DALLAS LORE SHARP
BEATRICE RAVENEL
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PRICE THIRTY-FIVE CENTS
AUGUST

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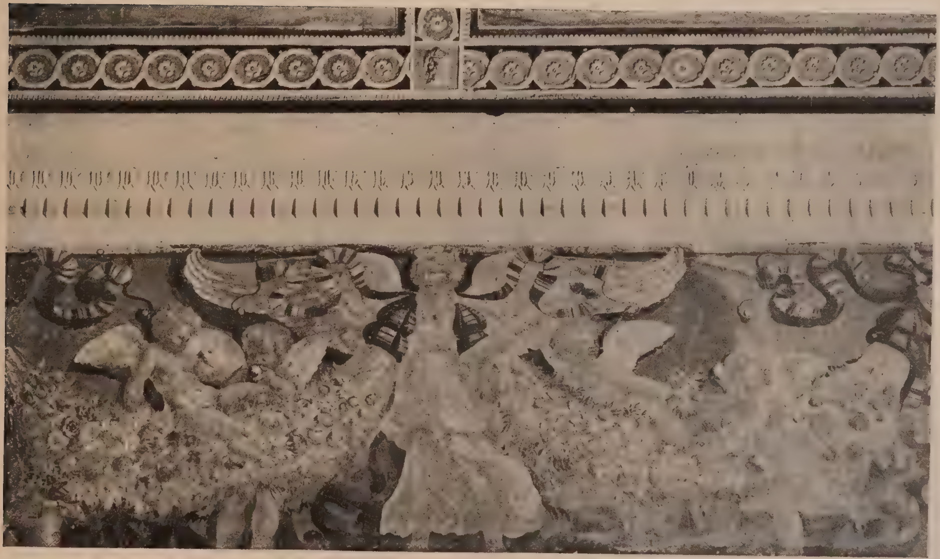
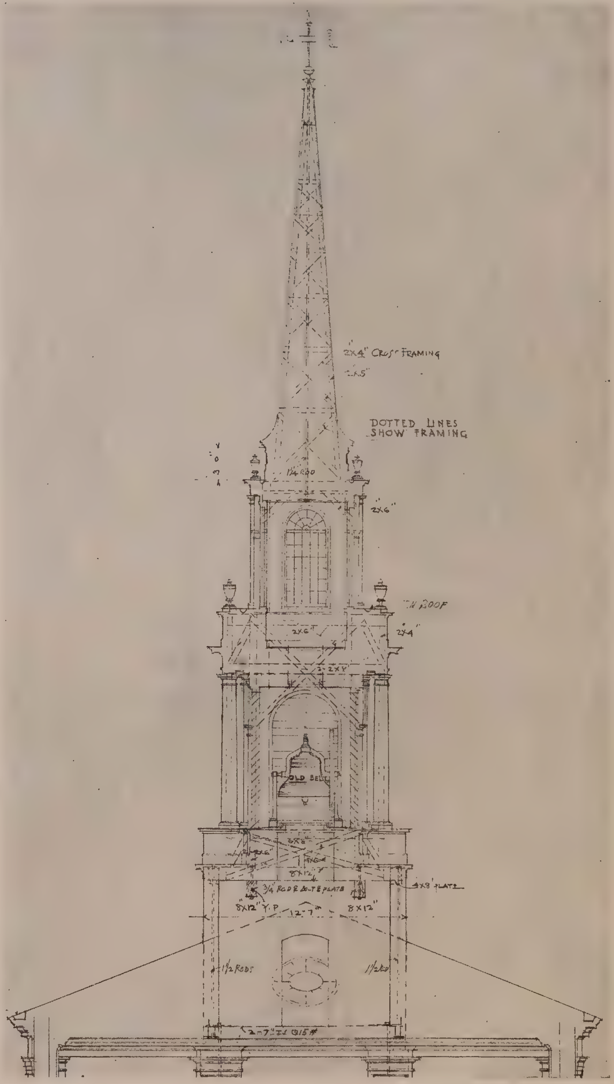
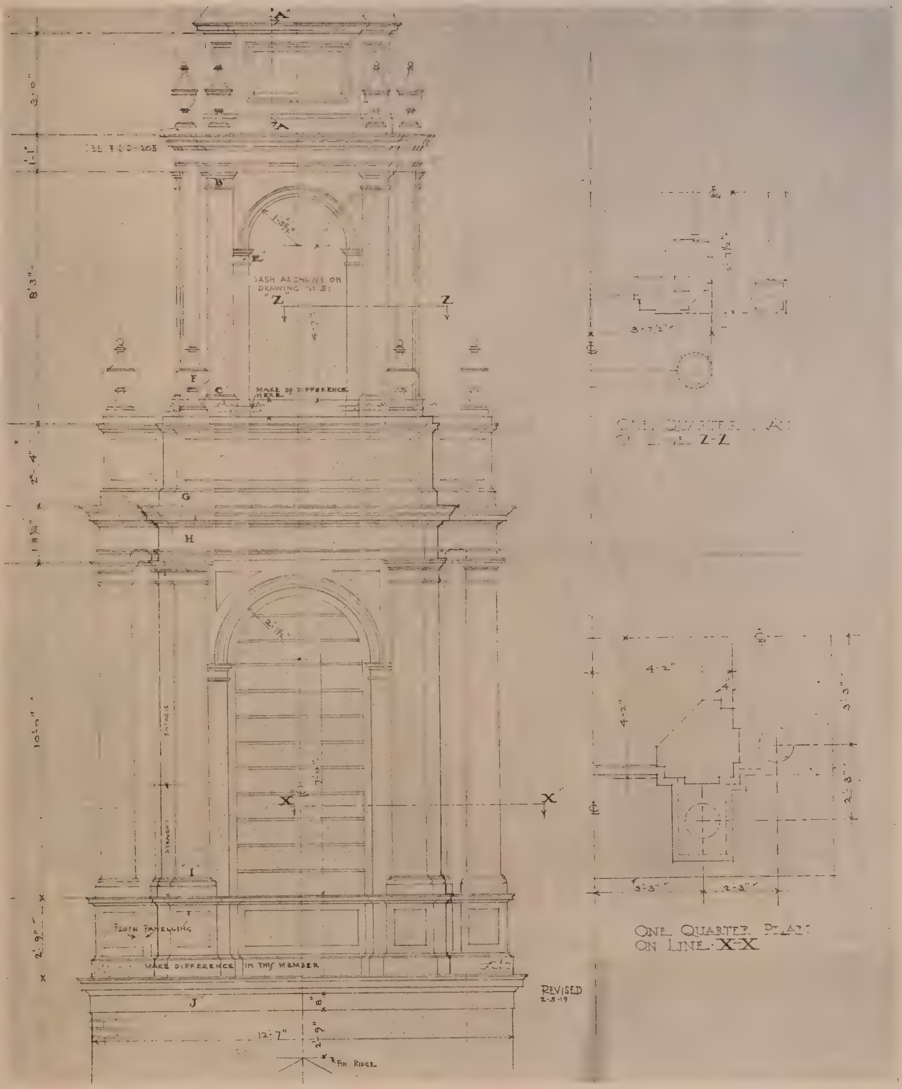


Photograph of Frieze of Giulio Romano in the Villa Madama Which Inspired Mr. Howells' Design for the Magazine Cover Shown at the Top of This Page.



Construction Details—Sprunt Memorial Presbyterian Church, Chapel Hill, North Carolina. Hobart B. Upjohn, Architect.



Construction Details—Sprunt Memorial Presbyterian Church, Chapel Hill, North Carolina. Hobart B. Upjohn, Architect.

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THE AMERICAN ACADEMY IN ROME

FROM a letter recently received by C. Grant LaFarge, Secretary of the American Academy in Rome from Gorham P. Stevens, Director, we quote the following items:

"January was a busy month for everyone at the Academy."

Mr. Mead and Mr. Blashfield arrived in Naples on January 21st, and Mr. Lascari and I went down to meet them. They were both in splendid health. Mr. Mead is not due in Rome until March. Mr. Blashfield came back to Rome with us. The mosaic decoration which Mr. Lascari is executing for him is going ahead at full speed.

Director Bert H. Hill of the American School of Classical Studies at Athens is in town. As that School is expanding rapidly, Director Hill has been studying our organization with some care. Mr. Davico explained the wonderful system of book-keeping, which he has devised, and I gave him copies of the various published statements which have to do with the organization and running of the Academy.

On January 28th the well-known Elizabethan Scholar Prof. Felix E. Schelling, Head of the Department of English at the University of Pennsylvania and a "Visitor" in the School of Classical Studies of the American Academy this year, delivered a splendid open lecture on the "Unity of the Arts." It was most beautifully presented, and it did us all a lot of good. We are going to see if he will permit us to publish it in small pamphlet form, so that copies may be given to future students.

We hear from New York that Composer Hanson's symphony is to be given by the New York Symphony Orchestra on February 3rd, and that he is to conduct it himself. It is a thrilling moment for us all.

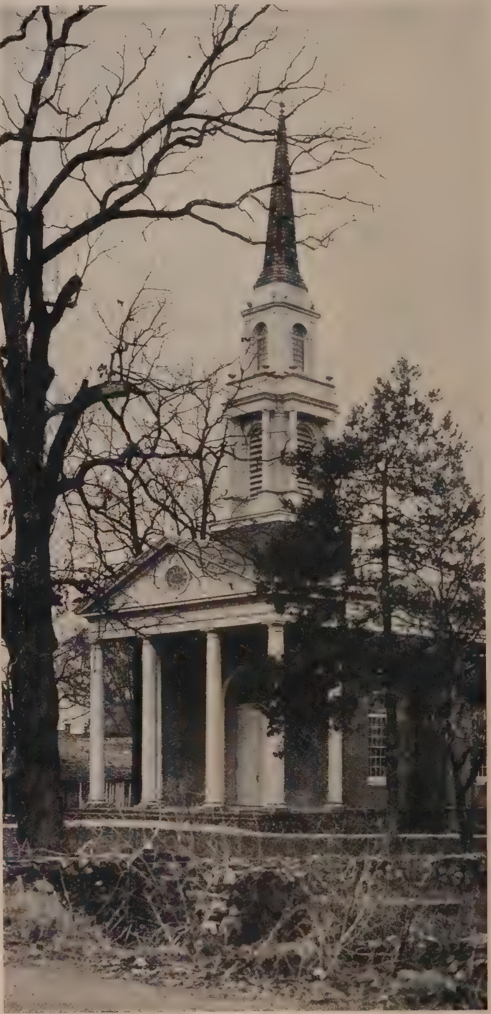
Painter Schwarz has designed a frame decorated with pastiglia for his last year's composition, and we have engaged a master in pastiglia to do the work at the Academy, so that all who are interested may learn how to work in this medium.

Preparations for the Greek trip are advancing. There will probably be about twenty-five in the party. Professor Van Buren is to undertake the lecturing, and Professor Lord to look after the business arrangements. All are to be inoculated against typhoid and vaccinated. We have secured a 50% reduction in railroad fares in Italy and Greece and on the boat to and from Greece.

Ambassador Child returned to Rome early in the month and he very kindly let the new members of the staff and student body call upon him.

Professors Manship and Faulkner have left for Egypt. Professor Manship put the finishing touches on his models only a few hours before he departed. He changed the design of the seat almost at the last moment, to the great advantage of the composition as a whole. He has offered to donate to the Academy the two large plaster casts, one of his Diana and the other of Acteon. These are splendid groups, and they will greatly help to decorate the Main Building.

The following donations have been made to the Academy: Mrs. George M. Tuttle, $200, for the concert of last spring; Mrs. Woodruff, 2,000 lire, for the concert of last spring; Miss Millicent Drake, $100, for the library.



Sprunt Memorial Presbyterian Church, Chapel Hill, North Carolina. Hobart B. Upjohn, Architect.
(See Construction Details on Pages 70 and 71.)

The first two gifts are due to Professor Lamond's efforts.

Mr. Davico has prepared a proposed budget for 1924-1925, which calls for practically the same amount of Lire for the running expenses as this year's budget called for.

A serious accident happened to the boilers of the heating plant of the Main Building. Two boilers are necessary for proper heating. We have been running on one boiler for just two weeks. Everyone took the accident in good part. Today for the first time two boilers are again running. I do not believe that it will be necessary for us to call upon New York for an extra sum, for Mr. Davico is already considerably under the budget.

Mr. Del Frate has been at work upon the extension of our tax exemption to the lot between the Main Building and the City of Rome. We are to call upon the Mayor of Rome at 8 A. M. next Friday to present a brief."

From a letter from Mr. Frank P. Fairbanks, Professor in Charge, School of Fine Arts, we quote the following:

"The annual Collaborative problem has engaged the attention of the Fellows for the past month. There has been a very serious effort to make the most of this competition. A decidedly friendly spirit has prevailed and an excellent sense of harmony has been noticed among the team members.

Team No. 1, Hafner, third year architect, Stevens, second year sculptor, and Bradford, 1st year painter, has been developing the entrance to a stadium, using a pylon treatment suggested by one of the gates to the town of Perugia.

Team No. 2, Schwars, third year painter, Marceau, second year architect, and Meyer, first year sculptor, is developing a fashionable watering place with a decoration treatment in the Pompeian manner.

Team No. 3, Amateis, 3rd year sculptor, Floegel, second year painter, and Deam, first year Architect, has chosen to treat a fountain in a garden with a standing figure in a niche, the architectural background to be elaborated in mosaic.

The drawings and models of the competitions will be shipped to New York in the next few days.

Early in the month Director Stevens, architect Hafner and the Professor in Charge of the School of Fine Arts, made an interesting visit to St. Peter's to inspect the work of restoration upon the figures of the model of the dome of St. Peter's by Michelangelo, on which Hafner had been engaged. We were granted the opportunity of seeing all the models stored in the various passages of the upper church. Beside a number of models of engineering schemes, proposals for the development of the Main façade of the church, many models of affiliated buildings, there was an elaborate model showing a lighting scheme of the exterior of the church and Piazza to be used on the occasion of important church functions.

A number of original clay figures for the Bernini colonnade are to be restored by the Vatican authorities and the sculptors of the Academy have been invited to do the work.

In the Music Department a concert was given at the Chiaraviglio during the month at which a new Sonata by Randall Thompson was performed. This work is the first important writing by Thompson during his Fellowship and showed a wide margin of progress over his former efforts. The Sonata was beautifully interpreted by Signorina Marcella Lantenay and was most favorably commented upon by the press.

Increasing interest is being shown in the compositions of Leo Sowerby. His Ballata for two pianos and orchestra was played at Minneapolis under Verbruggen at the end of January. It will be performed by the Chicago Orchestra about February 14 under Frederick Stock, and in the Spring at Washington and Baltimore by the Philadelphia Orchestra under Stokowski. His quintet will be played in Paris by the Fleury Ensemble, the finest wind instrument organization in Europe, on February 4th, and in Rome on March 8th by the Santa Cecilia quintet at the Festival of modern music organized by Alfredo Casella."

THE SKETCH PROBLEM

(*Continued from Page* 66)

very little on the floor, but an expression of very large windows on one side, and perhaps none on the other; and, say, two big tables. This will not look like a ballroom, or a stable. You show a building by rooms—try to show what is typical of the use of the rooms. There is a mosaic expression of each room.

But there is also the expression of the whole group, made of all the buildings *and* their rooms. Here too, the mosaic must explain—to bring out some portions, make others inconspicuous—use the mosaic to emphasize what people do in the building. A Railroad Station, for instance, will have a large room in which large numbers of people are accommodated, and some offices, not open to the public. You can leave all the public portions white (or "white" as compared to the other portions) and the other parts filled up with lines. This alone will give an explanation of the plan—will show how the people enter and "circulate." In other cases it can be the reverse—rooms "white" and circulation "gray." It is not so much a question of what to do; there are many things that you can do; what is important is that what you do shall explain the parti.

THE TECHNIQUE OF RENDERING, PART VI.

(*Continued from page* 41)

cobalt blue, is used to denote the basin of the fountain; and a very gentle touching-out with an eraser, of a fine white line, and some fine touches of Chinese white are put in with a pen to suggest the fountain jet.

The poché and lettering are full-black, all other lines are diluted ink. The washes are toned—that is color is added to the black—with yellow generally, but a touch of red is added to the border of the drawing. Points worth noting about this drawing include the well-considered border lines and beautiful drawing of the cartouche and title lettering.

PERSONALS

L. T. Bengtson, Architect, has removed his offices to Virginia Railway and Power Building, Richmond, Va.

Sunderland & Besecke, Architects, 406 Interstate Building, Kansas City, Mo., have dissolved partnership. Mr. Sunderland will remain at the old address and Mr. Besecke will open offices at 611 Title and Trust Building.

Ralph Wilson Weirick, Architect, has removed his office to 70 Fifth Avenue, New York.

W. V Justus & Co., Architects, have removed their offices to Moose Temple Building, Clearfield, Pa.

Walter Earle Bort has opened offices for the practice of architecture at 601-2 Wilson Building, Clinton, Iowa.

Harry Silverstein, Architect, has removed his offices to 574 Jefferson Avenue, Brooklyn, N. Y.

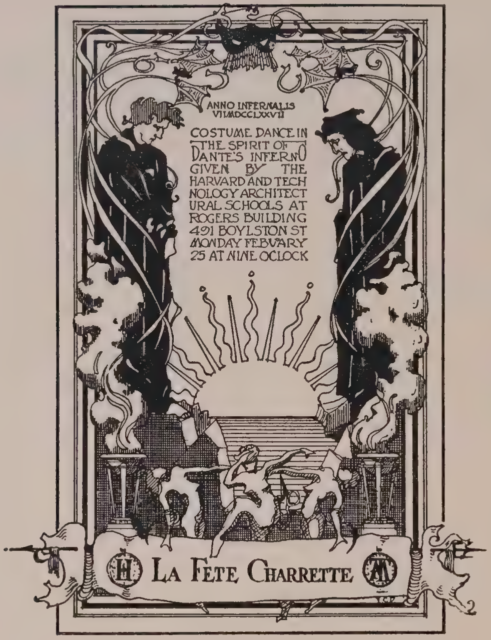
Clyde M. Hites, Designer and Builder, has opened offices at 300 Commercial Building, Louisville, Ky.

Wayne E. Bell, Architect, has removed his offices to 613-14 First National Bank Building, Fort Wayne, Ind.

Emmet G. Martin, Architect, formerly manager of the offices of Albert C. Martin, Architect, has opened offices for the practice of architecture at 603 Citizens National Bank Building, Los Angeles, Cal. Arlos R. Sedgley, Architect, is in charge.

C. E. Schermerhorn, Architect, and Watson K. Phillips, Architect, have removed their offices to 213 South Fifth Street, Philadelphia.

Mr. L. H. Osterhage, senior member of the firm of Osterhage & Sutton, died on December 12th. Byron Sutton has formed a partnership with Lester W. Routt, and will continue to practice under the firm name of Sutton & Routt, Architects and Engineers, Citizens Trust Building, Vincennes, Ind.


ANNO INFERNALIS
VIIMDCCLXXVII
COSTUME DANCE IN THE SPIRIT OF DANTE'S INFERNO GIVEN BY THE HARVARD AND TECHNOLOGY ARCHITECTURAL SCHOOLS AT ROGERS BUILDING 491 BOYLSTON ST MONDAY FEBVARY 25 AT NINE OCLOCK
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LA FETE CHARRETTE
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Design for Announcement of Fete Charette of Harvard and Technology Architectural Schools.

ATELIER CUNNINGHAM, WASHINGTON, D. C.

CALLING to your attention the Atelier Cunningham, but a few months old, having been started on its wild career October last by a few architectural draftsmen desirous of learning the mystic secrets of designing in that master of the arts "architecture." Having thus far obtained one 1st mention place, they are "pepped" with enthusiasm and likewise energy to obtain a few more of the same and then maybe when they get good a medal may fall their way.

But back to our story—a brief history of the events leading up to the tragedy. After the organizing, consisting mainly of collecting money, a large room with heat and light was obtained, centrally located in the downtown section. It is four flights up and one forward, being located right under the roof (that's where the heat and light is).

Now for the Patron. Major Harry F. Cunningham kindly offered to act as Patron, gratuitously, and encouraged the organization. Now Major Cunningham is a good scout (not boy scout), and he always carries with him an overload of enthusiasm for anything architectural, which he imparts in severe doses to those around him. He was patron of an atelier here before the war and after the armistice was signed was Director of the School of Decorative Art at the A. E. F. University at Beaune, France, and practiced his profession for two years in Paris and the devastated regions. After his return he was assistant professor in design at George Washington University until the Atelier was founded. He is practicing architect, and secretary of the local Chapter of the A. I. A., and has some very important work to his credit.

Of the membership of the Atelier, M. C. Hobson is Massier, Chas. L. Nutt is Sous-Massier, and Fred McCrary is Sous-Sous-Massier (he keeps the secrets of the mystic order).

HENRY BACON

HENRY BACON died Saturday, February 16, 1924 at the Post-Graduate Hospital, New York. He went to the hospital the preceeding Monday suffering from an infection of the intestines. An operation was performed and he was believed to be on the way to rceovery. Friday evening a relapse occurred and despite the efforts of the physicians he passed away early the following morning.

Henry Bacon is best known by the crowning achievement of his career, the Lincoln Memorial at Washington, D. C., which is recognized as one of the noblest and most beautiful examples of architecture ever produced.

Mr. Bacon was born at Watseka, Ill., November 28, 1866. He graduated from the University of Illinois in 1888.

In 1885—1888 he was connected with the firm of Chamberlain & Whidden, Boston, and 1888—1889 with McKim, Mead & White. He won the Rotch Traveling Scholarship and traveled in Europe 1889—1891. He was with McKim, Mead & White again from 1891—1897, then a member of the firm of Brite & Bacon until 1903. After that date he practiced architecture alone until the time of his death.

In 1923 Mr. Bacon was presented with the gold medal of the American Institute of Architects, in recognition of his work as architect of the Lincoln Memorial.

THE CHICAGO ATELIER

THE Chicago Atelier took the 1st Preliminary of the Paris Prize on January 5. Norman J. Schlossman placed 1st Alternate and George Conner and Bob Minkus received 2nd mentions. The Atelier now has four men eligible for the 2nd Preliminary to the Paris Prize; this will be held February 22nd. These men are Loebl, Bieg, Cerny and Schlossman.

Last Thursday, Charlie Morgan the well known Chicago delineator gave an interesting chalk talk. Norman Schlossman exhibited and talked on some sketches he made when abroad last year.

At this writing, February 13, we are looking forward to the sketch on February 16th. This is one of our own local competitions. Inasmuch, as one of Mr. Campbell's valuable water colors is the prize, a keen competition is expected. The results will be announced at a future writing. Mr. Sam Marx will be judge.

FREE EMPLOYMENT SERVICE FOR READERS OF PENCIL POINTS

(Other Items on Pages 86 and 90)

Position Wanted: By a senior general draftsman. Boston Tech. man as a general superintendent of construction for a New York firm of architects or engineers. Best references, hard worker, salary $75. per week for at least three months. Available April 1st. Box L. J. D., care of Pencil Points.

Spare Time Work Wanted: Electrical designs and layouts for lighting, power, low-tension, etc., for all types of buildings, capable of making complete drawings, calculations and specifications. Will work at architect's office or outside. Box H. P. Z., care of Pencil Points.

Chandelier Designer: Steady position, fine opportunity. Cox, Nostrand & Gunnison, Inc., 339 Adams Street, Brooklyn, N. Y.

J. E. Serrine & Company, Engineers, Greenville, S. C. are desirous of communicating with experienced draftsmen capable of designing reinforced concrete structures. Applicants should be capable of working up designs and figuring stresses and scheduling materials. Applicants are requested to give past experience and salary expected.

For Sale, 1 set of 10 volumes Raguenet's "Materiaux et Documents D'Architecture et de Sculpture" arranged in alphabetical order. Condition good as new. Price $100.00. Address W. J. Brown, 208-10 Bever Building, Cedar Rapids, Iowa.—*Adv.*

HERE *and* THERE *and* THIS *and* THAT

Conducted by RWR

HERE AND THERE AND THIS AND THAT

MR. JOHN A. AHLERS of Baltimore wins the ten dollar prize for the most interesting contribution to this department in February. The winner of the prize for this issue will be announced in the April number.

THE CHARETTE, a bright and newsy little paper published by the Pittsburgh Architectural Club, has this to say about our already famous department in its February number.

> We note a new department has opened by R. W. R. which may be a radio broadcasting station for all we know, entitled "Here and There and This and That". Not so bad we critically opine. On the second page we see a sketch by Charles Morse Stotz "Old Houses, Pittsburgh". A smart little sketch of the very best handling. We should like to welcome a new real sketch artist to town. There is a dandy poem "The Fifty-seven Lamps of Architecture" that has a real kick, if a poem can have such a spirituous quality.

The editor of the Charette has exactly hit our idea and has expressed it much more ably than we were able to do. Broadcasting is just what we are striving to do. We want to collect the ideas, sketches and other valuable material from our readers and broadcast them for the benefit of everybody. What is the use of an idea if only a few people know about it? Every reader of Pencil Points can make some valuable contribution to this department, so get busy and send them in.

HERE are a couple of verses submitted by D. C. Barbot, Charleston, S. C., inspired by the "Fifty-seven Lamps of Architecture" previously published.

I lived for a while in my tentean style,
For buckets of brew I was brewing,
When my friends by the score, paid me visits galore,
And I had to be up and be doing.
So I sought the advice of a banker so nice,
Whose purse was the size for compelling,
But before he had bought,
And a sucker was caught,
The brew, blew the roof off my dwelling.

Now I'm sitting alone. On a tablet of stone
Inscribing my story so telling,
I'm living the life, with a cliff dwellers wife,
In my rude pre-historian dwelling,
Where plans are not needed, nor Architects heeded;
Where something to drink is a SMILE.
In a pre-Volsteadorian,
Palaeozorian,
Ancient historean style.

Here is another verse submitted by Leon R. Levy, of Atlanta, Ga.

BY WAY OF INDUCEMENT TO THE AVERAGE CLIENT

There's a golden throne awaitin',
And a pair of downy wings,
And a phospherescent halo for the head;
There's a nickle-plated Irish harp
With seven silver strings
For this estimable person, when he's dead.

He'll recline upon a zephyr,
And will sip ambrosia pale,
With his halo (for the evening) on the shelf;
He deserves his rare good fortune
He's the owner of a house
Who doesn't say "Yes, we had no architect. I designed
the place and superintended every bit of it. How do
like this Looey Katorze library?"

ARCHITECT Robert W. Snyder of San Diego, Calif., sends a little suggestion of a practical nature. What does anybody think about the value of such material for publication in PENCIL POINTS.

"The busy architect who writes his own—has little time to keep up with the "latest" in the building world, specialties such as toggle switches, etc., etc. Would it be possible (I am sure it would be exceedingly valuable) to publish in a small section always and particularly set aside to it, each month, a list of the most up-to-date and **valuable improvements** in existing building elements or **entirely new** building elements such as, for example, servidors, inserts, casement adjusters, etc., etc. I would limit this list to perhaps a dozen or more articles each month, picked with the greatest care and noted with the briefest of descriptive notes and the name of the manufacturer.

"This would certainly be a most handy reminder to the busy specification writer and would add greatly to the already high office value of your magazine."

HERE are specifications of the 1923 Annual Christmas Dinner of the office of Cram & Ferguson, Boston. Here is an opportunity for specification writers to compare their work with that of an office nationally known for the qaulity of its output.

SOUVENIR SPECIFICATIONS FOR THE 1923 CHRISTMAS LUNCHEON

General Conditions. This joint is designed to develop the full strength of the assembled members. Make proper allowance for expansion and contraction.

The Committee guarantees to make all members tight, and keep them in repair at their own expense for three years, and will make good all damages caused by leeks.

Any shoring required in connection with this work will be done by the Committee free of charge.

Leave necessary opening for ice cream. Ascertain its location before commencing work.

Clean up at completion.

Cider. All cider used throughout the building, unless otherwise specified, is to be best quality pure apple cider.

Chicken Salad Sandwiches. All to be selected, water soaked, long, winter slaughtered chickens, and run through the picking machine at the building before being served. Use hair and sand in proper proportions.

Cheese and Nut Sandwiches. Wherever paleolithic sandwiches are called for, a topping in the following proportions is to be applied: 1 part freshly baked bread,
¾ parts clean, sharp, cheese,
¾ parts well graded nuts.
This topping to be applied ¾ inches thick.

Sliced Ham Sandwiches. Wherever ham sandwiches are called for, stretch one thickness of sliced ham, laid with lapped joints, and securely fastened. All to be first class, or equal.

Nuts. All nuts and washers to be of standard size and design.

Candy. All candy to be clean, sharp, well graded, and free from foreign matter, and acceptable to the Architects. No rubber footings will be permitted.

Ice Cream. All bricks not otherwise mentioned, to be best quality, merchantable, common bricks of standard size and free from defects impairing their strength and durability. The bricks shall contain at least 30% of the dark variety. No soft or misshaped bricks will be accepted. All to be delivered to the job in their original packages, and opened in the presence of the Architects.

Doughnuts. Leave handholes in doughnuts where called for.

Cheese. Holes to an aggregate percentage of not over 99% will be permitted, provided they do not affect the strength and edibility of the cheese.

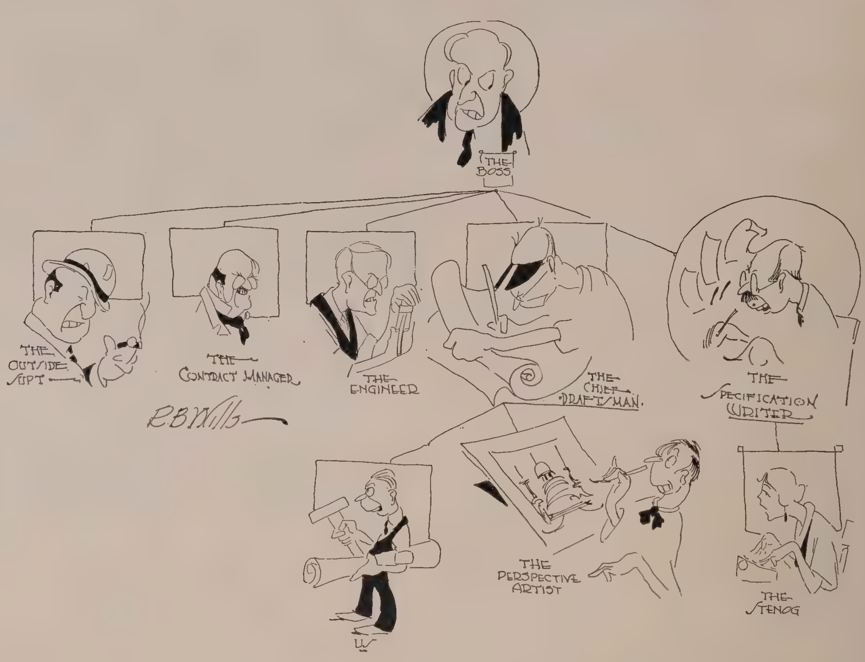


Chart of Architect's Organization by R. B. Wills.

R. B. WILLS, draftsman and Pencil Pointer of Boston, Mass., submits the above drawing which he claims represents a most excellent type of office organization which has been found to work successfully under the most trying conditions. He has reduced this organization to chart form for the benefit of those who may have had difficulty in working out a correct and successful office system.

Charles W. Johnson, Payette, Idaho, says he would like to see samples of lettering from the best drawing boards in the profession. We would like to consider for publication material of this sort and would be glad to receive either originals or photostates of good lettering; either complete alphabets, inscriptions or mere fragments.

MORRIS HENRY HOBBS of Chicago, cannot get along with one copy of PENCIL POINTS. Read what he says in a recent letter.

"PENCIL POINTS is certainly getting into a class by itself. I just sent in my subscription to be sent to my home, for while I read it constantly at the office I begin to feel I would like to keep a permanent reference file at home as well. Keep up the good work! The 1924 sketch competition is welcome news. It helps bring out new talent among those who are just developing."

OF COURSE we are just as human as anybody else and like to have nice things said about us. Capt. J. E. Wood, Assistant to Engineer Commissioner, Washington, D. C., says a lot in a few words.

"The February number of PENCIL POINTS is one of which you should feel justly proud. It is real Pencil Points and the best ever. If you know how thoroughly I mean this you would find no interest in more lengthy or detailed compliments."

AND here comes Mr. G. F. Ashley of Ashley & Evers, Los Angeles, Calif.

"It is only a short time ago that your publication first came to my attention. I thought so highly of it that I requested the Rapid Blue Print Co. of this city to obtain a complete file of your back numbers for us, besides a current subscription. If you can assist them to complete our files I would appreciate it. It seems to me that the architectural juniors of today are very fortunate in having such a publication as yours to seek advice in. Reading PENCIL POINTS cannot fail to be of vast benefit to college architectural students for the indications they will receive of the practical problems awaiting them. I cannot help thinking of the "grief" I would have been saved had PENCIL POINTS been available in my own apprentice days Your reprints are a great benefit to the profession, juniors and seniors both. Wishing you continued and great success."

THE draftsmen of the Civil Service Council No. 44, City of New York, had a blowout and party at the Hotel Majestic on January 23rd. In connection with this event they published an amusing little booklet, the cover of which will be reproduced in the next issue through the courtesy of A. L. L. Martin, Chief Draftsman.

CHARLES D. WHITE, of Portland, Me., submits the following as his contribution to the question of filing reference material. This subject seems to have aroused much interest and, in addition to the various suggestions submitted and already published, we expect in an early issue to publish an article by a man who has gathered together an extraordinary amount of excellent material and who will tell in picture and text just how he has done it.

The problem of filing magazine plates, articles and similar material so that any subject may readily be found is an important feature in offices and with individuals.

The writer has tried many systems and having found them inadequate has had in use for several years a method which has met every requirement.

All plates and articles of value and interest are ripped from magazines, trimmed to uniform size, the classification number is written in upper right hand corner with soft pencil and are kept in regular letter file folders.

These folders are cut with one right end tab which bears the classification number and subject name and are kept in vertical letter file drawers.

The classification list is the key to the situation. This is based on the Dewey Decimal System which is in use in most Public Libraries.

Some years ago the University of Illinois published a pamphlet, The Extension of the Dewey Decimal System to Architecture. This was taken as the basis of my classification list, and newer products and methods added to it.

Sometime later an article appeared in Architecture by Harry Leslie Walker who had developed and used the same system in his own practice. His article gives a very complete classification and will meet the needs of any office or individual.

Compared with an alphabetical system this may sound complicated, in practice it is not so. Once the classification list is compiled it becomes a simple matter to place proper number on each article as received and it is automatically cared for.

When a given subject is wanted, instead of pouring through magazines, or bound volumes, or by means of alphabetical catalogue finding articles that may be in a half dozen places to which they must be returned, a moment's work by office boy or stenographer puts the folder on your table and as easily returns it to its proper place.

The folders may be kept in one box letter file at the start and may be expanded to any number of filing drawers without any arrangement or revision.

Briefly the Dewey Decimal System consists in using numbers for the different subjects using a decimal point and decimal numbers for subdivisions, for example:

Landscape Architecture is given the number 711. If one has only small interest and few plates on this subject, one folder with this number contains them all. But if interest or growth demands, it expands as follows:

711. Landscape Architecture
712. Parks and grounds.
713. Roadways
714. Water
715. Trees
717. Accessories

Perhaps this number grows and we have

717.1 Arbors
717.2 Summer Houses
717.3 Seats
717.4 Outlooks
717.5 Pergolas
717.6 Garden Walls
717.7 Steps
717.8 Statues, Vases
717.9 Lattice Work

In like manner any number can be expanded.

Schools, for example, are filed under 727. with subdivisions as may be needed.

727. Schools
727.1 Grade Schools
727.12 Private Schools
727.14 Preparatory Schools
727.15 High Schools
727.16 Trade Schools
727.2 Academies
727.3 Colleges
727.4 Professional Schools
727.5 Laboratories

Under Architectural Design we have

729.1 The Elevation
729.2 The Plan
729.3 Wall treatment
729.32 Supports
  .321 Piers
  .322 Orders, Architectural
  .3221 Tuscan
  .3222 Doric
  .3224 Corinthian
  .3225 Composite
729.33 Arches and Arcades

This shows to what extent the classification can be expanded or in what simple elements it can be retained.

Any subject can be expanded to meet the amount of material or the wishes of the individual and once the list is arranged the work is simple and efficient.

HERE is another suggestion from E. C. Styles, landscape architect of Oakmont, Pa.

In regard to the question by W. B. Brown in the January issue I might suggest two things which I have found helpful to me and which I have been working up for the last three years. The first is a file of individual illustrations taken from PENCIL POINTS, *The Architectural Record*, *The National Geographic*, etc. In my particular profession information is desired on an extremely wide range of subjects and I use the heaviest grade obtainable of 5 x 8 plain cards (carrid by any commercial stationary store). This size will accommodate all but very large illustrations if cut close. I mount the illustrations on the cards with thin paste and squeeze them with a triangle over sketch paper. Then I put them under a heavy weight for 24 hours and file them in 5 x 8 pasteboard box files of the "Pull-out" type. I will use steel files later on as they will be easier to handle and the insurance companies will carry them. I prefer this size bcause it is small enough to handle easily and I have the cards punched a thousand at a time so that they will fit a three ring pocket note book. The cards are filed under a system of headings which I have devised as being applicable to my work and I print the heading on plain yellow file index cards half cut and run the cuts alphabetically and alternately (printing the heading on both sides of the index-card so that if I need to introduce a new heading I can simply reverse the cards beyond the new heading without disturbing the filing. Where I have a heading which covers a large number of associated things I use pink and blue index cards in one third and one fifth cuts. This system appeals to me bcause it is visible, easily altered or amended, is quite inexpensive and the cards can be used flat on the drafting table (much easier than a book) and can be put in the pocket note book and carried into the field to show to engineers in charge of work or clients as an aid to the explaining of presentation drawings and preliminary sketches. I have been working in odd moments now and have about five thousand illustrations covering almost everything under the sun in regard to design, detail, etc., and the time spent cannot be noticed in looking back over the time which has elapsed since the inception of this scheme. Another thing which I am doing is to separate my Pencil Points, *Architectural Records,* etc., into allied subject matter and having them bound by a book bindery in plain black cloth with gold lettering on the back. The average cost is about a dollar eighty per volume. For instance, I took the *National Geographic* special issue on Washington, D. C., of four or five years ago and special issue this past year and the article on the Lincoln Memorial in the Architectural Record this year and had them bound into one volume for which I would not take quite a bit. I have taken the articles on pencil sketching, working drawings, crayon drawings, water colors, lithographs, etc., and had them all bound into one volume, etc. I am also collecting pencil sketches and reproductions of water colors, crayon, pastels, etc., and mounting them on 12.1 x 8.6 ledger paper which I buy at a book bindery and they will be bound into separate volumes entitled Pencil-Watercolor-and Pen and Ink. In regard to my first mentioned system of 5 x 3 card files I should think that an architect could use the standard A. I. A. filing notation or a system of headings of his own. I hope this may be of some small help to Mr. Brown and to any other reader, particularly draftsmen who hope (as all do) to be in business for themselves some day and who can spare time from bowling, billiards, dates, etc., at this time in their life.

THE Detroit Architectural Bowling League is now well advanced in its second season. The teams meet each Friday evening at the Recreation Bldg. where the league has ten alleys reserved for the season. The schedule extends through twenty-seven weeks and A. B. C. rules are strictly adhered to. The principal Architects offices of the city are represented.

Tabulations below are for seventeen weeks.

Team	Won	Lost	Percent
Albert Kahn Engineers	43	8	.843
Albert Kahn Architects	35	16	.686
Donaldson & Meier	31	20	.608
Brown & Derrick	30	21	.588
Janke, Venman & Krecke	26	25	.510
Geo. D Mason & Co.	21	30	.412
Malcomson & Higginbotham	20	31	.392
Smith, Hinchman & Grylls	17	34	.333
Van Leyen & Schilling	17	34	.333
McCall, Snyder & McLean	13	36	.294

INDIVIDUAL AVERAGES

(10 highest men in the league)

Player	Games Played	Ave.
Jolson	51	178
Kalsched	51	176
Krecke	51	172
Miller	3	170
McGrath	30	168
Penhale	12	168
Kern	51	167
Bassler	49	167
Miehls	48	166
Roof	51	166

Team high, one game	Donaldson & Meier	989
Team high, three games	A. Kahn, Engrs.	2747
Individual high, one game	Jolson	246
Individual high, three games	Kalsched	632

THE grand splurge of the Architectural Bowling League of New York has at last broken down our natural modesty so we now bid for our place in the sun.

Not being in such close proximity to the millions of Wall Street, we have not been able to engage the services of an inspiring press agent. Nevertheless, we wish it to be known that the drafting force of Perkins, Fellows & Hamilton have for the past year been conducting a bowling tournament of their own at the X-10-U-8 bowling alleys, Chicago.

Realizing that the reputation of our fair city would depend to a great extent upon our skill, in one short season we overcame the difficulty of keeping the ball out of the gutter, so that now, despite a few well spotted "hills," we can chalk up quite a few "strikes" and "spares."

In the natural course of events a series of prizes was offered by the different departments. The first prize by the Mechanical Department—a slightly used steam radiator valve, is very useful in nailing down stubborn thumb tacks, and with a little Sapolio can be made quite decorative. The second prize is a most remarkable slide rule, donated by our Structural Engineering Department, and is guaranteed to compute anything under the sun, including your income tax. The third prize by the Architectural Department, a well worn and broken-in erasing shield, has created considerable interest as this is one of our most used drawing intruments. The members of our firm, always and ever ready to further a good cause, have offered as fourth prize a really remarkably beautiful hand-engraved cancelled pay check.

Spurred on by these wonderful prizes we have almost made bowling history, as our high scores will testify.

Chief Draftsman "Dobe"	176
"Doc" Foster	199
Tom Lavaty	233
"Joe Duck"	172
"Moe" Dunn	186
"Little John"	190
"Luke McLuke"	156
"Skeezix"	229
"Mosher" Greenberg	139

Wishing Pencil Points a prosperous year, we are
The drafting force of
PERKINS, FELLOWS & HAMILTON,
Chicago, Illinois.

J. S. Crytzer, 1079 Boylston St., Boston, would like to secure copies of Pencil Points for 1920, excepting September and October, and also a copy of June, 1922.

The Allen Decorating Co., 117 Cutler Bldg., East Ave., Rochester, N. Y., would like copies of Pencil Points prior to January, 1921.

Mr. Solomon Klein, 145½ Elizabeth Ave., Newark, N. J., has copies of Pencil Points for November and December, 1922, which he would like to exchange for a copy of March, 1923, and a copy of June, 1920.

H. M. King, professor of architecture, North Dakota Agricultural College, Agricultural College, North Dak. would like to secure a copy of Pencil Points for February, 1922.

A. Wetter, 4042 No. Keystone Ave., Chicago, has Pencil Points complete for 1923, and will sell them at 25c each.

The above notices are printed because we are unable to supply the copies required and are anxious to help our subscribers complete their sets. Communications regarding copies offered for sale may be direct with this office or with the person requiring them.

Pencil Sketch by George F. Spinti, Jr., Milwaukee, Wis.

Here is a little pencil sketch submitted by George F. Spinti, Jr., Milwaukee, Wis.

and one from Ben Wyatt of New Orleans, La.

and another of St. Martins-in-the-fields, London, by Lionel C. Algoren, Minneapolis.

WE are glad to see sketches submitted from so many parts of the country, especially from those who have heretofore been unknown to us. We are not able to accept for publication all material offered, but hope that all of our readers producing work of merit will submit it for publication in this column.

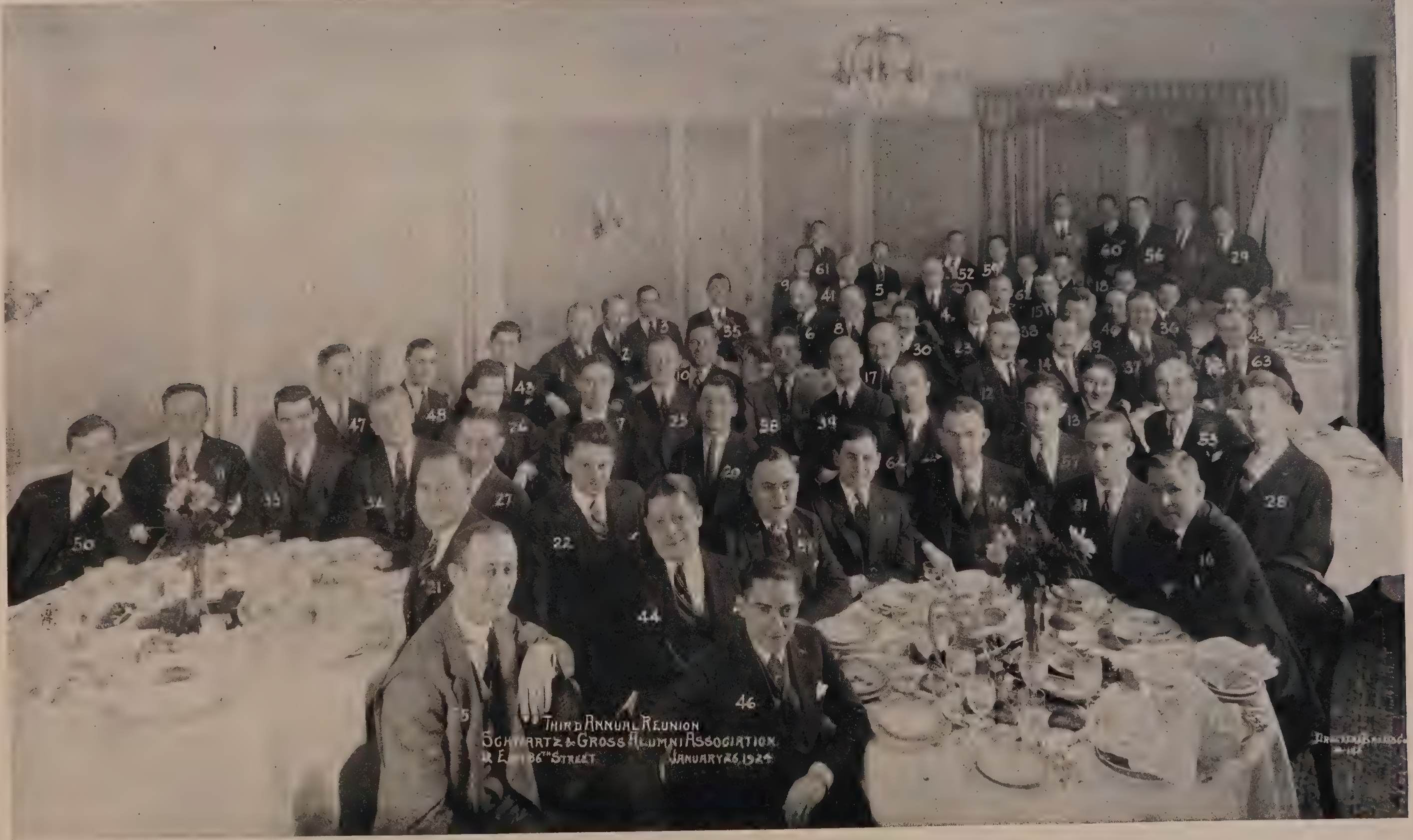
Pencil Sketch of St. Martins-in-the-Fields, London, by Lionel C. Algoren.

Pencil Sketch by Ben Wyatt, New Orleans, La.

ON THE evening of January 26th the Alumni Association of the office of Schwartz & Gross held its third annual reunion and dinner. A photograph of the entire gathering is reproduced on page 80. Mr. B. Richfield is responsibile for the menu card. A good time was had by all and Mr. William H. Meyer was elected chairman for the coming year. Mr. Meyer requests that all those eligible for membership communicate with him so that they may be included in the next reunion.

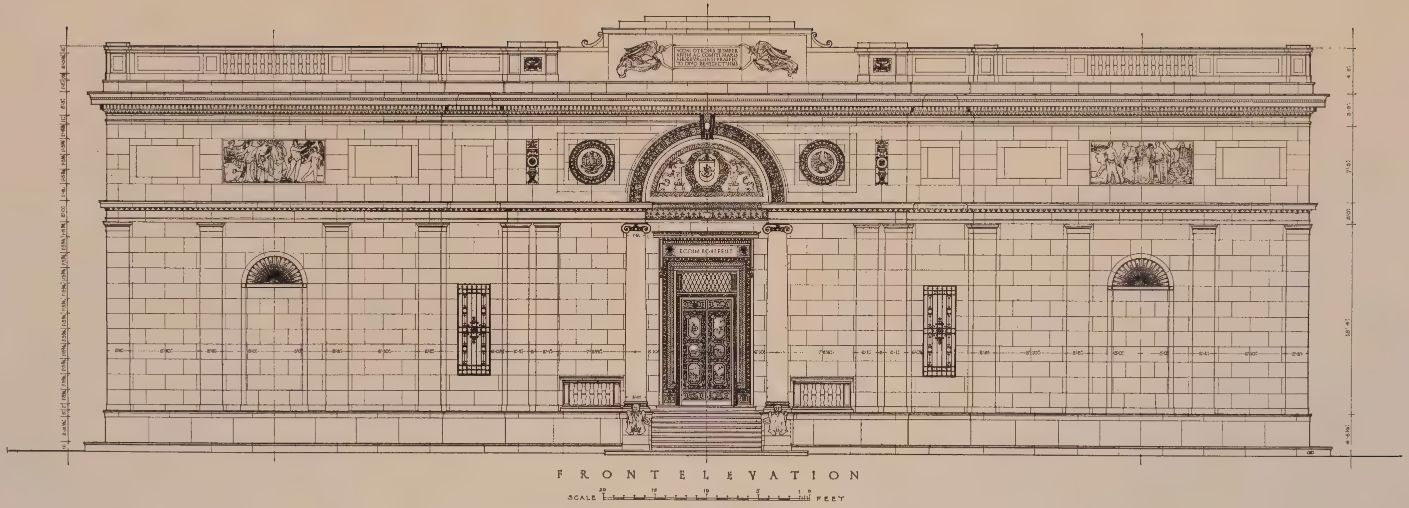
WE WOULD like to receive for publication in this department photographs of architects' organizations. Get the crowd together in the drafing room or elsewhere, with the boss in the middle, and send the picture to us with a list of those present. We may get bold sometime and publish a picture of ourselves. This is more in the nature of a threat than a promise. If enough of you will send pictures of your office personnel we may not have to fall back upon the desperate expedient of publishing one of ourselves.

THIS paragraph is addressed primarily to our readers located outside of the United States. We want you to feel just as free to contribute either to this column or to any other section of PECNIL POINTS as those located nearer by. You who live in Canada, Great Britain, Australia, New Zealand, India, Japan, China or elsewhere we feel are just as much members of the PENCIL POINTS family as anyone else. Let us hear from you! Do not hesitate to submit material, to ask questions and to take full part in all of our activities. Our columns are open to members of the architectural fraternity in all parts of the world.

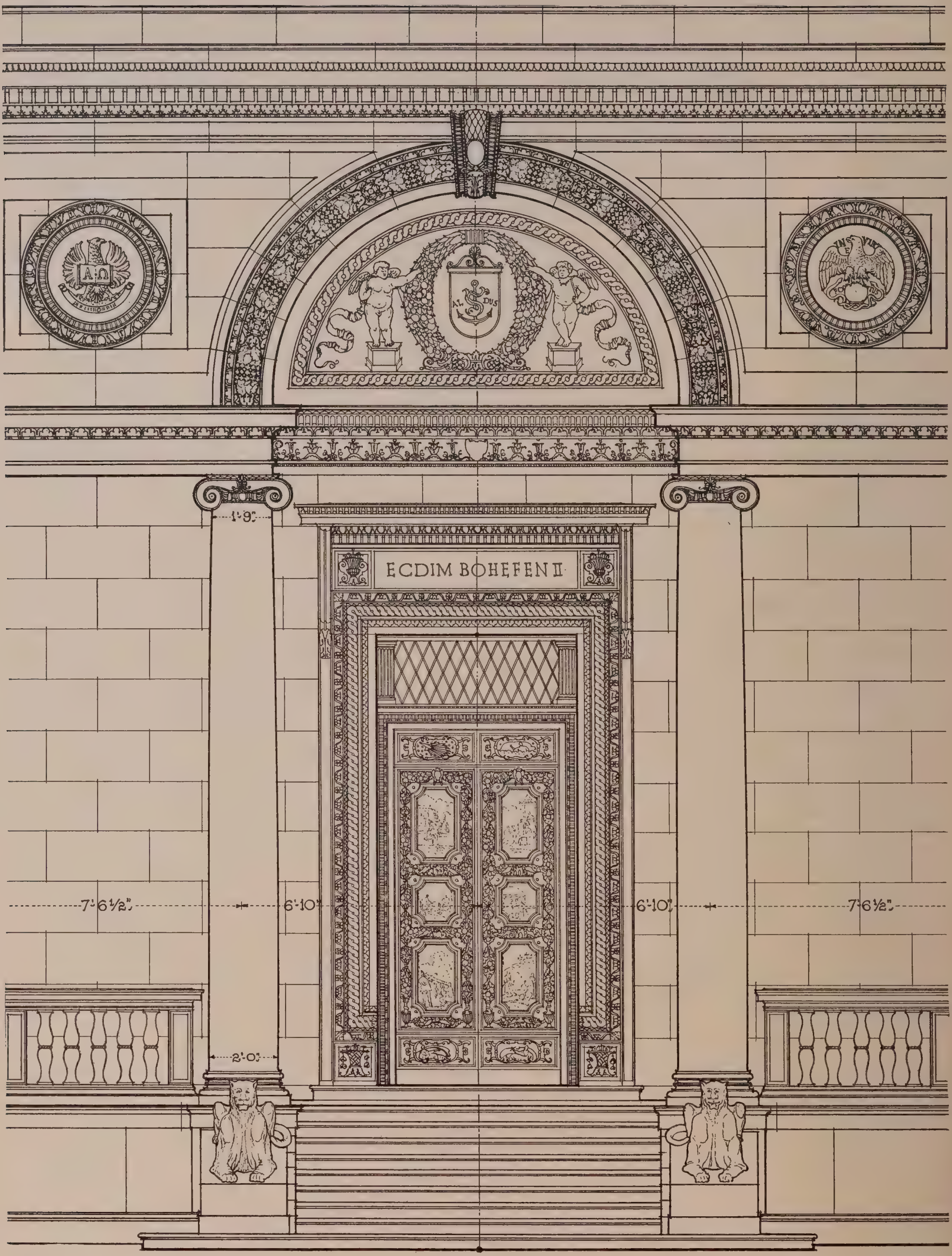


Third Annual Reunion, Schwartz and Gross Alumni Association.

1. *Arthur Gross,* 2. *S. I. Schwartz,* 3. *B. N. Marcus,* 4. *J. S. Anderson,* 5. *H. Aaronson,* 6. *A. G. Berger,* 7. *Frank Bowers,* 8. *D. Brummer,* 9. *E. Cohen,* 10. *Fabian Crystal,* 11. *J. H. Daucher,* 12. *Djorup,* 13. *Edward Franklin,* 14. *Andrew Fritz,* 15. *John W. Friend,* 16. *Geo. Fuchs,* 17. *Emil Ginsburger,* 18. *C. Greenberg,* 19. *B. Glucksman,* 20. *H. Gittleman,* 21. *J. Arthur Herbert,* 22. *Kurt Hermann,* 23. *Chas. Hartmann,* 24. *Jessor,* 25. *D. M. Jones,* 26. *Joseph Jordan,* 27. *A. Knapp,* 28. *Robert Kilmartin,* 29. *Fred Landes,* 30. *Horace L. Luckman,* 31. *H. A. Lutkenhouse,* 32. *Wm. J. Marangelo,* 33. *J. A. McSorely,* 34. *A. L. MacLennan,* 35. *Wm. H. Meyer,* 36. *Henry Mohr,* 37. *R. A. Mueller,* 38. *Wm. Miltenberger.* 39. *Ed. J. Meehan,* 40. *Nathan,* 41. *F. Odencrantz,* 42. *I. Phillips,* 43. *John Porsolt,* 44. *B. Richfield,* 45. *Harry Rindermann,* 46. *Robert Rubin,* 47. *John Schachetti,* 48. *Lawrence Schachetti,* 49. *J. G. Schwhmann, Jr.,* 50. *A. Schwartz,* 51. *A. Segal,* 52. *E. H. Shrader,* 53. *Chas. Strauss,* 54. *Carl Smith,* 55. *A. A. Tearle,* 56. *Otto Taub,* 57. *Louis Turcotte,* 58. *J. W. Todd,* 59. *Paul Tracki,* 60. *H. D. Thrush,* 61. *J. Weinberg,* 62. *A. Winchell,* 63. *A. Wein,* 64. *Fischer.*



Front Elevation, Library for J. Pierpont Morgan, New York City. McKim, Mead & White, Architects.



Detail of Entrance, (Reproduced at Exact Size of Original,) Library for J. Pierpont Morgan, New York City.
McKim, Mead & White, Architects.

THE SPECIFICATION DESK

A Department for Specification Writers

MISCELLANEOUS ITEMS OF CONSTRUCTION

PART XVI

By Otto Gaertner

In this series of notes Mr. Otto Gaertner, A.I.A., Associate Member American Society of Civil Engineers, is treating of a number of the minor matters of construction that are troublesome unless the architect happens to have met a similar problem previously—matters of a more or less special nature.—Ed.

Garages (*Continued*)—It is often convenient to have apartments over the garages for the use of the caretaker or other employees. Sometimes this is desirable so as not to leave the garage unprotected as otherwise it would be necessary to employ a watchman. It is not well and not safe to have too many tenants in the same building and for this reason the New York City Bureau of Buildings places restrictions on the exceptions which it grants when it permits the use of a garage building for dwelling purposes. It will issue such a permit when the ground floor area of the garage does not exceed five thousand square feet and when the occupants are to be the applicant or his employees. By applicant they mean the owner or lessee although some one may apply for the permit for him. Also the occupants may be the applicant's employee and one other tenant. Furthermore, not more than two stories above the garage may be occupied or used as dwelling apartments, and such apartments must be separated from the garage proper by fire-retarding walls and floors.

The walls and floors must not be pierced by more than one opening and the opening must be protected by a fireproof self-closing door. A direct entrance from the street without passing through the garage is also required. To keep gasoline and exhaust fumes from penetrating to the apartments it is preferable to omit the interior opening with the self-closing fire door and to bare only an exterior entrance as required by the Bureau of Buildings. Whenever the building is occupied by two families and two stories above the garage, fire escapes or other approved secondary means of escape must be provided for each story above the garage.

If it is to be fire escapes, they must be made according to the Building Code which requires that they be of incombustible materials and sufficiently strong to carry with safety a superimposed load of one hundred pounds per square foot. The fire escape should be unencumbered and should be kept well painted and in good repair. It is generally specified to be steel with an angle iron frame, reinforced slat floor, angle iron brackets through the walls and provided with braces, a railing enclosure of steel bars, and stairs of steel plate strings with steel bar treads riveted to angles which are riveted to the steel strings, the stairs being provided with a hand rail on each side.

When the building exceeds five thousand square feet in ground floor area, and the above mentioned dwelling space is required it may be possible to divide the area into more than one unit by means of one or more masonry walls without openings, and if openings must be put into them, the opening may be protected by automatic self closing fire doors, one door on each side of each opening. In this way the fire hazard is diminished to that of an apartment in connection with a garage of five thousand square feet ground floor area.

Occasionally, while the building stores cars, it may not really be a garage and such regulations do not apply. For instance, in the case of a sales or sales service building where only new cars are kept and where they are not moved by their own power, the cars do not contain volatile inflammable oil or gasoline and no gasoline or oil is kept there in quantities for use in connection with the cars nor do the usual electrical requirements for a garage apply in such a case. But the use of the building will be more flexible if it is built so that it can be turned into a garage as well.

The electrical requirements only apply in those parts of a garage building in which automobiles carrying volatile inflammable liquids are kept for storage or use and all that portion of the building which is on or below the floor or floors on which such automobiles are kept unless it is separated therefrom by tight unpierced walls and floors. The purpose of this in connection with the electrical work is to prevent the ignition of an accumulation of escaping volatile vapors by a spark. Some of the vapors are heavier than air and remain near the floor so that as much of the work as possible should be kept up high.

All electric wiring and cables should be installed in approved metal conduit or approved armored cable. In offices and show rooms, however, they may be run in approved metal mouldings. Metal conduit, armored and metal moulding should be so installed that all outlet and junction boxes shall be located at least four feet above the floor. This does not apply to flexible pendant lamp or portable connections which may be run exposed.

Flexible cords for pendant lamps must be approved reinforced cord and flexible cords for portable lamps, motors, or other apparatus must be approved cord especially designed for rough usage. The end of the latter must not plug into an ordinary base plug outfit but must be so connected that the connection may be easily broken by a pull from any direction. Therefore, the portable cord must carry the male end of an approved pin type plug connector or equivalent, the female end being of such design or hung so that the connection can easily be broken. The female end would be directly connected to the wiring in the outlet box at a height to keep the connector at least four feet above the floor.

(To Be Continued)

PUBLICATIONS OF INTEREST TO THE SPECIFICATION WRITER.

Any publication mentioned under this heading will be sent free, unless otherwise noted, upon request, to readers of Pencil Points *by the firm issuing the publication. When writing for any of these items please mention* Pencil Points.

Kewanee In Service.—Profusely illustrated portfolio presenting hundreds of successful installations. Industrial buildings as well as all types of business, residential and public buildings are included. 90 pp. 8½ x 11. Kewanee Boiler Co., Kewanee, Ill.

Published by the same firm Catalog No. 75 describing water heating garbage burners. Complete data on the subject. 36 *pp.* 6 x 9. *Catalog No. 77 Kewanee Radiators. A valuable booklet on radiation with roughing in instructions, tables of capacities, etc. Uniform with preceding. Catalog No. 78 Firebox Boilers. Covers subject of large boilers for various uses. Many blue prints, much technical and scientific data.* 6 x 9. 50 *pp. Catalog No. 79 Powers Boilers. A valuable booklet on the subject for architects, draftsmen and engineers.* 36 *pp.* 6 x 9.

Special Grilles.—Catalog No. 66A showing special designs suitable for interpretation in bronze, brass, iron and steel. Many illustrations and much useful data. 40 pp. 6½ x 9½. Tuttle & Bailey Mfg. Co., 2 West 45th St., New York.

Through the Ages.—Monthly magazine published by the National Association of Marble Dealers. Attractive illustrations of marble work showing both exteriors and interiors. The January number contains illustrations of the Wisconsin State Capitol. 8½ x 11. 70 pp. 242 Rockerfeller Bldg., Cleveland, Ohio.

Zinc as a Paint Pigment.—Technical treatise on the subject with many illustrations, reports of tests, etc. 24 pp. 6 x 9. New Jersey Zinc Co., 160 Front St., N. Y. C.

Published by the same firm, The Thickness of White Paint Films, The Microscopy of Paint and Rubber Pigments and Factors Governing Paint Consistency.

Olde Stonesfield Roofs.—Brochure with color plates illustrating artistic roofs and walks. Eighteen subjects. 5½ x 6½. The John D. Emack Co., 112 South 16th St., Philadelphia, Pa.

Brixment for Perfect Mortar.—Booklet with frontispiece illustrating residence designed by Mr. Charles A. Platt. Complete information regarding Brixment mortar. 8½ x 11. 16 pp. Louisville Cement Co., Louisville, Ky.

Elevator Door Efficiency.—Illustrated catalog showing various types of elevator doors, detail drawings, specifications, safety appliances, etc. 8 x 10¾. 48 pp. The Peelle Co., Brooklyn, N. Y.

A Matter of Health and Comfort.—Booklet No. 2331 on the subject of modern screening against insects. 16 pp. 5 x 8. New Jersey Wire Cloth Co., Trenton, N. J.

Rotary Ash Receiver.—Data sheet with detail drawing and specifications giving all the necessary information about this type of equipment. 8½ x 11. Sharp Rotary Ash Receiver Corpn., Springfield, Mass.

Hard-n-tyte Engineering Service.—Booklet on the subject of floor construction and maintenance with especial reference to industrial conditions. 16 pp. 8 x 11. General Chemical Co., 40 Rector St., N. Y. C.

Solid Steel Reversible Windows.—Illustrated Booklet No. 1-24 covering equipment for office buildings, schools, hospitals and other structures. Sectional drawings and details. 20 pp. 9 x 12. Crittall Casement Window Co., Detroit, Mich.

Drawing Instruments.—Catalog C-24 covering full line of American made instruments of the highest quality. Completely illustrated and described. 32 pp. 6 x 9. C. F. Pease Co., 813 No. Franklin St., Chicago, Ill.

Portland Cement.—Booklet illustrated with photographs and many detail drawings showing construction. Data regarding finishes, etc. 16 pp. 8½ x 11. Portland Cement Assn., 111 W. Washington St., Chicago, Ill.

Ornamental Brass and Bronze Work.—Illustrated catalog of a large variety of standard and special equipment, tablets, railings, etc. 64 pp. 8½ x 11. Newman Mfg. Co., 717 Sycamore St., Cincinnati, Ohio.

Report of a Special Investigation.—Interesting report made by H. P. Gould Co. for the Long-Bell Lumber Co. Shows savings to owners and contractors possible by the use of certain grades of lumber. Long-Bell Co., R. A. Long Bldg., Kansas City, Mo.

Wrought Hardware.—Complete catalog showing complete line of steel, brass and bronze hardware. A valuable book in any office. 260 pp. 6½ x 9½. The Stanley Works, New Britain, Conn.

Lightning Prevention.—Booklet covering the subject for all types of builders and under all conditions. Much technical data. 84 pp. 8½ x 11. W. C. Shinn Mfg. Co., 53 West Jackson Blvd., Chicago, Ill.

Ruud Water Heaters.—Loose leaf specification portfolio giving complete information on the subject. Large layout sheets, complete instructions for installing, sections, details, specifications, etc. 8½ x 11. Ruud Mfg. Co., Pittsburgh, Pa.

Sylphon Specialties.—Series of loose leaf bulletins giving accurate engineering data on heating specialties, temperature and pressure controlling instruments, valves, etc. Should be in the files of every specification writer, architect and draftsman. The Fulton Co., Knoxville, Tenn.

Store Fronts in Architectural Terra Cotta.—Illustrated portfolio with many sectional drawings and construction details of great value to architects and draftsmen. 44 pp. 8½ x 11. New Jersey Terra Cotta Co., Singer Bldg., N. Y. C.

China Bathroom Accessories.—Catalog F. Illustrates and describes complete Fairfacts line including medicine cabinets, and price lists. 16 pp. 3½ x 9. The Fairfacts Co., Inc., 234 W. 14th St., N. Y. C.

Published by the same firm, The Perfect Bathroom, describing most modern conveniences and necessities. Uniform in style and size with above.

Pecora Caulking and Glazing Compound.—Booklet showing methods of obviating leakage of air, wind, dust and water. Blue prints. 4½ x 5½. 18 pp. Pecora Paint Co., 4th and Sedgley Ave., Philadelphia, Pa.

Roofing Specifications.—Covers Standard Trinidad Lake Asphalt Roofing, Membrane Waterproofing and Wasphalt Flooring. 8½ x 11. Barber Asphalt Co., Philadelphia, Pa.

Plumbing Specification.—Condensed specification for all types of plumbing fixtures. Crane Co., 836 So. Michigan Ave., Chicago, Ill.

Specification for Thatched Roof Effect.—Weatherbest Stained Shingle Co. (formerly Transfer Stained Shingle Co., Inc.) North Tonawanda, N. Y.

Acoustile Data Sheet.—Includes specification, detail drawings and other valuable information pertaining to the treatment of walls and ceilings of auditoriums and other buildings where sound control is a factor. Mazer Acoustile Co., 9 So. 24th St., Philadelphia, Pa.

Household Water Softener.—Bulletin announcing equipment suitable for this purpose. Duro Pump & Mfg. Co., Dayton, Ohio.

Greenhouse Specifications.—Complete skeleton specification including complete greenhouse ventilating, heating plants and all greenhouse accessories. Lord & Burnham Co., Irvington-on-Hudson, N. Y.

Standard Specifications for Lime Plaster.—Bulletin 305-A covering subject briefly but completely. National Lime Assn., Construction Dept., Mather Bldg., Washington, D. C.

Crane Door Check.—Bulletin describing this new device showing section, methods of operation and all details. Bay State Pump Co., 564 East 1st Street, South Boston, Mass.

The Campbell Solid Metal Window.—Data sheet with sectional drawings describing Model 88. Complete specifications. Campbell Metal Window Corpn., 8 West 40th St., N. Y. C.

Note Book.—The Warren-Knight Co., 136 No. 12th St., Philadelphia, Pa. have prepared a little note book, pocket size, for the use of architects, draftsmen and engineers. Contains directions for reading angles, calendar, blank pages for memoranda, etc. Ask for Note Book A. P.

Steel-Tapes Cables.—Booklet on the subject of electric cables for underground work. Tables and much useful data. 20 pp. 6 x 9. Okonite Co., 501 5th Ave., New York City.

Specification.—Covers subject of proper protection for steel and iron structures. Sagle-Picher Lead Co., 864-208 So. La Salle St., Chicago, Ill.

Hot Water in Large Quantities.—Booklet on automatic storage systems where the best service in hot water is required. Sectional drawings, layouts, specifications and much useful data. 6 x 9. 40 pp. Ruud Mfg. Co., Pittsburgh, Pa.

The Milcor Manual.—Data book No. 20. Covers materials and methods of fireproof construction. Many construction drawings. Typical details applicable to a wide variety of buildings. 64 pp. 8½ x 11. Milwaukee Corrugating Co., Milwaukee, Wis.

Published by the same firm. Metallic Construction for the Modern Home. Booklet showing application of Milcor products to the modern residence. Color plates and much useful data. 20 pp. 8½ x 11.

Gold-Seal Treadlite Tile.—Handsome brochure in color on the subject of modern floor treatment. Many designs suitable for a large variety of uses. Suggestions for every type of building. Specifications. 40 pp. 8½ x 11. Bonded Floors Co., 1421 Chestnut St. Philadelphia, Pa. Published by the same firm. Hospital Floors, a booklet dealing with this important subject. Illustrated in color. Distinctive Floors.—Folder illustrated in color with twelve plates showing different patterns of Gold-Seal Rubber Tile. Standard Specification for Installing Battleship Linoleum over Concrete. A. I. A. File 28 covers standard practice for this material.

Lithoprints, What They Are, How They Are Made, How They Are Used, What They Cost.—Complete description with samples of this process having wide application in all drafting rooms. Loose-leaf binder. 8½ x 11. Lithoprint Co., 43 Warren St., N. Y. C.

"White" Door Beds and Space Saving Devices.—Catalog F-97. Covers subject completely with diagrams, drawings and many suggestions for saving space in the modern apartment, residence and other buildings of various types. Sectional drawings and many valuable suggestions. 24 pp. 8½ x 11. The White Door Bed Co., 130 No. Wells St., Chicago, Ill.

Atlantic Terra Cotta.—Monthly magazine for architects and draftsmen. February issue deals with Giovanni della Robbia and his work. Six full page plates and detail of terra cotta construction. Atlantic Terra Cotta Co., 350 Madison Ave., New York City.

Glazed Tiles and Trimmers.—Publication No. K-400. A book bound in cloth of the greatest service to the drafting room. Hundreds of drawings showing mouldings, architraves, bases and many special tiles for particular uses. Sectional drawings and much useful data. 80 pp. 8½ x 11. Associated Tile Manufacturers, Beaver Falls, Pa.

Burt Catalog.—Treats the problems of ventilation involved in factories, residences, public buildings, etc. Technical data and complete description of the Burt line of ventilators. 128 pp. 6 x 9. Burt Mfg Co., Akron, Ohio.

ARCHITECTURAL HUMANITIES

(*Continued from page* 46)

a moral that would be of lasting value to any one of his hearers. The same is true in different fields of Milton B. Medary, Jr., of Philadelphia, who is responsible for the new plan of New Orleans; of Clinton H. Blake, Jr., with his extensive knowledge of the law in its application to the architect's problem; or of F. W. Wentworth, as to the economic significance of the fire waste; of J. Randolph Coolidge, Jr., of the "Graphic Arts"; Ralph Adams Cram, on the "Problem of Church Building," etc., through a long list of distinguished men, competent to inspire the student to be more than a draftsman, and to realize in its fullest sense the possibilities that lie hidden in the word "architect."

That such a course has been started at the Massachusetts Institute of Technology is significant only as an indication, or recognition, of the tendency of the times in which we live.

That there is, furthermore, need for a course of this nature is perhaps truer now than it was before the war, for now, if ever, the solution of the many problems that confront mankind is dependent upon a recognition of the point of view and the rights of others. A sense of justice that goes far beyond the letter of the law and strives to interpret the prompting spirit is sure to result from such an acquaintance with the needs and problems of others as talks on the lines indicated above would inevitably suggest. Such a sense of justice would in its turn bring a desire for co-operation, and a will to serve, which, to my belief, are two elements essential to that existence for which we are all striving,—an existence that is founded on an intelligent recognition and appreciation of the rights of others.

PENCIL POINTS

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AS WE SEE IT

SINCE the day, now nearly four years ago, when the first issue of PENCIL POINTS was published, we have been in close and intimate touch with architectural draftsmen, either personally or by correspondence, in all parts of the United States. In gathering material for publication in PENCIL POINTS and in many other ways we have also had much to do with practicing architects, having been favored with the subscriptions of over 4,000 of these men.

Almost from the beginning of our work we became aware of certain feelings and conditions having to do with what we will call the human relations existing in the practice of architecture. Of course, this element is present and is important in every business and profession. The relations of employer and employee have occupied a great deal of thought and much space in the public prints in all lines of American activities, so it is not to be wondered at that, occupying the peculiar position we do with respect to the architectural profession, many matters in which these relations are involved should have been brought to our notice.

Especially since we started our employment bureau, designed to function as a national clearing house for architects desiring to employ men and for men seeking positions in architects' offices, certain definite complaints have come to us which may be summarized somewhat as follows: Not a few architects complain that their employees are more interested in watching the clock than in doing the necessary work of the office, that the elements of enthusiasm and interest in the employer's problems and the general welfare of the job are sometimes sadly lacking. Draftsmen complain of unsatisfactory working conditions, and inadequate compensation, the necessity for frequent changes, lack of due notice of termination of employment—being told on Thursday that they are through on Saturday, etc.

The architect's office is not exactly like any other type of organization and presents its own peculiar problems from its standpoint which we are here considering. In the very nature of things the volume of work in any given office fluctuates. Taken as a whole these fluctuations are probably greater than with any other equally important group in the United States accomplishing a similar volume of work. If an architect has finished a big job and has nothing on the boards to take its place he naturally cuts down his force accordingly. In most offices fair and due notice is given, but in some this is not the case. Whenever summary dismissal occurs there is a feeling of injustice and soreness with frequent failure on the part of those dismissed to consider the standpoint of the employer whose plans perhaps have suddenly been changed and may be entirely beyond his control. A better and more sympathetic understanding of the problems and difficulties involved would frequently remove the feeling of distrust which all too often is engendered. Architects, by taking their associates into their confidence and indeed into their business family, so to speak, might greatly minimize the unfortunate results which so frequently occur when such an understanding does not exist.

The practice of architecture which, as several of our contributors in this issue have pointed out, is a practical combination of an art and a business, holds great possibilities for the cultivation of reciprocal trust and loyalty as between employers and those who work for a salary. In no branch of endeavor can a group of finer men be found, both architects and draftsmen, men of artistic tendencies with an appreciation of and love for what we will call the finer things of life. These men have feelings which are correspondingly sensitive and it is easy to irritate those feelings to the great detriment and loss of all concerned. Some draftsmen have felt and said that the only way for them to get their rights, financially and otherwise, is to form a union and deal with their employers on a union basis. We are absolutely opposed to any such idea for what seem to us two most excellent reasons. First, it is not necessary and second it would not work. To place the relations of architect and draftsman on any such basis would immediately kill many of the finer things existing today in architects' offices throughout the land. To our mind nothing finer exists than the friendly, cordial and satisfactory relations to be found in hundreds of offices with which we are acquainted. Perfect trust exists not only as between employer and employee but also harmony and good will as between the various employees responsible for different parts of the work of the office. We recently, in one day, had talks with two draftsmen during which the conditions existing in two offices of about equal size in the same city were discussed. In the first the changes in personnel are infrequent. The firm never does an enormous amount of work, but the fluctuations in volume are below the average. The men are made to feel that they are colleagues of the members of the firm and that their success is intimately bound up with the success of the organization as a whole. The members of the firm are wide-awake and friendly. They say "Hello" when they come in in the morning and they say "Good night, Bill" when they leave at night. You couldn't pry a man out of that organization with a crowbar. The problem of the human relations has been solved in that office. The other picture is quite different. The firm, employing about the same number of men, apparently makes it a point not to know the names of the men in the drafting room, or at least not to use them. The whole office is run on a cold and impersonal basis. They watch the clock in that office and changes in personnel are frequent. In this case the question of human relations is apparently neglected or subordinated to other considerations and everybody involved loses because such a situation exists. The men get into sloppy habits and, if they stay there long enough, deteriorate. The boss is losing, if he only knew it, one of the most valuable assets any employer can have, the enthusiastic loyalty of those who are on his payroll.

We say that most architects intend to treat their men right and do so, and that most draftsmen intend to give their employers a square deal and do it. All the fuss and ferment and kicking comes from a comparatively small minority of the architects and draftsmen and while this can probably never be entirely eradicated, we believe that it can be still further reduced.

We have not overlooked the fact that friction and misunderstandings are not confined to the relations of the architect and the draftsman, but occur not infrequently between members of the staff. Cases of this kind have come to our attention from time to time. Some draftsmen complain that the man who checks their work for errors antagonizes and irritates them unnecessarily by the manner in which he calls attention to their mistakes, and they feel that a more considerate, tactful manner would serve the purpose better. The other side of this picture was shown to us by a man who lamented that the men whose work he checks hate him without any just cause that he can discover. Some draftsmen complain that their progress is blocked by some man over them who is afraid that they may take his job, and so it goes. Though such instances do not change the fact that in general the relations of members of the architect's staff to each other are harmonious, friction where it occurs is unquestionably very harmful and should be done away with. Where the relations between the architect and his staff are of the best there is, naturally, little likelihood of serious friction between members of the staff, but where it exists it is a matter for correction on the part of the architect as well as that of the men directly involved.

One matter we wish to record here which we believe to be of the utmost significance. We have called upon many architects from all parts of the Country for material for our pages. We have asked for documents which are frequently considered of a private nature by the architects owning them. In no case has permission to publish anything we asked for ever been withheld from us. Architects have recognized the fact that the work we are doing tends to improve standards of draftsmanship and they have, without exception, come forward to give us all possible help in our educational work. We have found a general and keen interest on the part of architects in the development of the younger men of the profession, both draftsmen and students. Prominent men have given of their time without compensation to contribute to our symposium issues, of which this is one, and there has everywhere been shown a cordial spirit of helpfulness and co-operation which has not only been gratifying to us, but has come by way of added evidence, if such were needed, that the draftsmen have no better friends than the rank and file of the architectural profession. This only serves to confirm us in our opinion, as expressed above, that conditions in our profession are good and that in the few respects in which they are not entirely satisfactory they can and will be speedily improved and adjusted.

Another significant development has taken place and bids fair to go still further. We refer to the formation and enlargement of architectural clubs embracing in their memberships both architects and architectural draftsmen. We are strong for the further development of this idea and recommend it for earnest consideration wherever there is a possible nucleus for such an organization. The younger men and the older men get together at the meetings away from the stress of the business day, to the great benefit of both. The juniors can and do learn much from such informal contact and a spirit of good fellowship and understanding is developed which is shown in hundreds of little ways and which tends to remove causes for unrest and dissatisfaction. In those cities where flourishing clubs of this kind are in existence conditions are measurably better than elsewhere and they are improving all the time.

In the following pages will be found letters and informal articles from a number of men, each stating his own point of view toward the matter under discussion. It is hoped that the readers of PENCIL POINTS who can throw additional light on this subject by writing something of a constructive nature will let us hear from them. Our pages are wide open to to all who desire temperately to discuss the question of human relations. We say temperately because a violent and bitter statement serves no good purpose. A few architects apparently think no draftsmen are any good and a few draftsmen apparently regard all architects as their natural enemies. Both are wrong. Personal experiences pointing out possible improvements are welcome and will be given space in our next issue.

THE HUMAN ELEMENT IN THE ARCHITECT'S ORGANIZATION

A Symposium

From Albert Kahn

YOUR letter of February 14th dealing with the subject of "The Human Element in the Architect's Organization" leads me to recall the words of John Ruskin, written more than fifty years ago, which embody the principles adopted by the modern manufacturer in the management of his plant.

"Because the production and obtaining of any commodity involves necessarily the agency of many lives and hands, the manufacturer becomes in the course of his business the master and governor of large masses of men in a more direct, though less confessed, way than a military officer; so that on him falls in a great part the responsibility for the kind of life they lead: and it becomes his duty not only to be always considering how to produce what he sells in the best and cheapest form, but how to make the various employments involved in the production or transference of it, most beneficial to the men employed."

These words are a justification for the welfare work we see all around us today, the object of which is to develop in the employee a spirit of common interest in all that is good for the business, and also to impress upon him the fact that he is not working for an organization without a soul.

If welfare work is justified in industry it is equally justified, though it be of a different character, in a profession such as architecture. That of the former is concerned with methods of improving the economic status of the worker; his physical, intellectual and social condition. That of the latter is concerned with methods which develop an atmosphere of brightness, cheerfulness, and contentment in the organization as a whole.

Architecture involves the production of that which proves not only of utilitarian, but also of aesthetic value; and things beautiful are most easily produced under agreeable and pleasing circumstances. The best work is the result of enthusiasm, and the enthusiastic worker is the joy and bulwark of the wise employer.

In general we find but little difficulty in developing the desired atmosphere in our organization. We strive to be a large, happy family wherein each one, from the office boy to the chief designer, is encouraged to feel the importance of his position; to assume responsibilities commensurate with his position; and to take a common interest in the activities of the firm. Constructive criticism, no matter by whom offered, is always welcome and carefully acted upon. No individual member of our staff is given credit for any work which emanates from this office. We pride ourselves on being able to say that our work is, at all times, the result of the combined efforts of many. We aim at that spirit of general co-ordination which is essential in every successful undertaking.

Much of the human element in our organization is derived from our social evenings, our dances, masquerade balls, and Christmas festivities; our athletic clubs—base ball, hand ball and bowling. So far as our outside staff of field superintendents is concerned, we greatly benefit by the periodical stag-smoker, an event which is first given up to a discussion of the various problems that present themselves and methods of their solution, followed by a dinner and an evening's entertainment.

We work and we play together. And with it all we constantly keep before our eyes the main principle of our firm, to give the client just a little more than he expects to receive.

"Oh, the little more and how much it is,
The little less and what worlds away."

From Mauran, Russell & Crowell, Architects, St. Louis

THE Human Element is as essential in the Architect's organization as it is in the Architect himself. Architecture is more than a profession—it is an Art. It is creative; has a soul. No architect's office was ever successfully maintained unless there was in it some real human being. The Architect's contact with clients is personal in the extreme; his problems those which enter importantly into the lives of human beings.

However, it is necessary to determine where the "human element" should cease in order that its weaker sister, "human nature" may not come in and result in a laxity and inefficiency in the organization. A modern architectural organization must appeal to both the business man and the home builder. There must be an atmosphere of artistic efficiency.

Three essentials there are to the successful creation of a Human Element in any organization: respect, responsibility and reciprocity.

If the heads of the organization, by virtue of their high professional standards and splendid accomplishments, command the respect of their employees, the employees will soon fall heir to these standards and will take pride in maintaining them.

Very few there are who do not react to responsibility. The old adage of the position ennobling the man is perhaps trite, but true. No matter how menial the task, if it is dignified by a feeling of responsibility in its performance, it takes on a new light. For instance, every applicant for the position at the switchboard in our outer office, is interviewed in a most serious and dignified manner, and the fact that it is the first contact an outsider has with the entire organization is brought firmly to her attention, and the responsibility which lies with her in making that contact courteous, satisfactory and efficient is emphasized. Immediately an importance is attached to the position, a pride results in its performance, and a pleasure.

And last, but not least, reciprocity—that keynote of modern industrial relations, often called co-operation, which is most successfully obtained through a Human Element in the organization; not a human element which is evidenced in annual company dinners, or special occasions when everyone tries painfully to "get together," but rather a day by day, and in every way, sort of Human Element growing out mutual interest and esteem.

There come, in the history of every architectural career, the great drives when one must go over the top. At these times a service is required of employees which cannot be bought; draftsmen's "time" which cannot be figured in dollars and cents, and had there not been a Human Element in the organization, there would be no loyalty in meeting the emergency.

Not long ago, the Federal Reserve Bank job was launched from this office in all the fury which so often accompanies Governmental operations. It was a Herculean task and for successful fulfillment required the labor of the man familiar with the job, fresh reinforcements being in the nature of a hindrance rather than a help. Every man put his shoulder to the wheel—there were no positions—the best draftsman gladly assorted blue prints. When one man's own task was done, he was not through, but rendered assistance to another's not yet complete. And by such concentrated effort, the seemingly impossible was accomplished. After the job was over—the firm gave a delightful luncheon at a beautiful hotel, where everyone "got together" and sort of patted each other on the back. It was a service gladly given and not "sold"; a service *earned* by the firm on account of the absolute esteem and respect in which it was held by the employees.

There is one more very important phase of the Architect's office in which the Human Element is valuable, and that is the contact with the contractors and material men. If these men always leave the office with a feeling of having been treated considerately and fairly, they will never fail to give the Architect their best, when the time comes for him to need their services.

Architecture is, perhaps, not a lucrative profession but it holds great wealth for those who sincerely wish to "serve" the profession to which they have dedicated their lives, and for "those" there must be the Human Element in the Architect's Organization.

From Bertram Grosvenor Goodhue, New York

I HAVE received a request from you for an expression of opinion as to the "human element in the architect's organization." I am not quite clear in my mind as to just what is meant by this phrase. At any rate, I have no knowledge of, and no dealings with, any inhuman element, though your very question would seem to suggest that there were offices in which the inhuman element predominated—which may very well be true.

My mail is made up about as follows: Advertisements destined for, and promptly received by, the waste paper basket—85%; requests for information of all sorts and kinds, of which yours is one—10%. The disposition to see these follow the first lot is strong, but often cannot be humored. Some of them indeed come from Washington, where, I take it, they have as close a personal record of everybody in America as the Finance Minister in Moscow has of his flock. There remains 5% bone fide correspondence, and of this 5%, once in a while, there is one from a client and a new commission comes in—the saving leaven in the whole lot. Feeling better, I now go on to answer your question.

The practice of architecture is always, first and foremost, a profession, which means that the architect does not "go after" work. What would you think of a lawyer, or a doctor, who tried to increase his clientele or number of patients by getting them away from other practitioners? Yet the belief that this is tolerable behavior is strongly held in certain quarters, and seems to be constantly increasing. The "human element" begins right here, I think. If you mean the treatment accorded those who aid and abet me, then let me say that, whatever is in store for humanity after death, the belief of this office, which we try to carry out in practice, is, as I think I have said before in your columns, that everybody is entitled to life, liberty and—not the pursuit of happiness—but the actual possession of happiness itself as far as this can be provided. To this end, I have no time clock. In fact on the rare occasions when I, myself, keep office hours, have found that some trifling advantage of the absence of this useful instrument, so beloved by the efficiency experts, has been taken. Nevertheless, the men do fill out time sheets, and though being largely of the artistic temperament and somewhat irregular as to the hours they keep, do keep them, for the thirty-nine hours of the working week are all on their time sheets. It is the custom in many offices to specialize the men. That is again *great* from the standpoint of the efficiency expert, and is the practice in vogue of every large factory. The temptation is strong to practice it here; but it doesn't seem just, that because a man does a thing well he should do that and nothing else even though he does it in less time and with more profit to his employer. Certainly routine of any kind is not conducive to happiness, and certainly a variety of interests and pursuits is.

It is not evident whether there is anything else that requires an answer, and what I have written will not, I fear, be regarded as an answer to much of anything. I had almost forgotten to state that there is a filing system and a clerical force here, very much more capable organizations in this direction, the young men and women who compose it here are about as satisfactory as could be expected. To be sure, we often have an awful time finding some drawing that has got into the wrong file, in which case we speak harshly to the filing clerk; and once a in while an office boy puts the wrong letter into an envelope, but humanity is frail and I am sure that if I were out in the system trying to file drawings and mail letters instead of sitting here idling and writing letters to you, I should do even worse.

From M. Nirdlinger of Nirdlinger & Marlier, Architects, Pittsburgh, Pa.

REPLYING to your favor of the 14th instant, asking us to discuss "The Human Element" in the architect's organization, will confess every time I think of this problem I get it from a different angle.

To begin with, to obtain a satisfactory result both sides must be evenly matched as to sincerity and let us say honest endeavor. We must disregard the draftsman and architect that are liabilities, and in doing so reduce our number to about 75 per cent. Many a sincere architect has been discouraged from trying to build up an organization with employees of poor caliber, and on the other hand, many an employee has lost opportunity by sticking with the architect of poor caliber. We must, therefore, allow both sides to judge the material with which they surround themselves, and eliminating the undesirables, offer the following ten commandments for the employee and employer, beginning with the employee's commandments:

(1) Honor thine employer and work to his, which are thine, interests, and which will surely result in a fitting reward.

(2) Be guided in thy work by the lamp of truth.

(3) Keep holy thine employer's trust in thee.

(4) Obey, but remember thou, a pen must be pushed and a pencil must be lead.

(5) Thou shalt not kill "time."

(6) Thou shalt not commit errors.

(7) Thou shalt not expect or demand more than thy worth.

(8) Thou shalt not put false words or figures on thy drawings.

(9) Thou shalt not unjustly criticize thy neighbor's work.

(10) Thou shalt not crib from thy neighbor even though he be a poor fish with one scale.

Then for the architect and employer offer the following:

(1) Thou shalt enter and depart without "knocking."

(2) Thou shalt work hard six days and leave the rest for Sabbath, but fail not to get thy job.

(3) Again get thy job and keep thy force always busy as Satan finds work for idle hands, and remember thee thine own profits.

(4) Honor thine office boy, the junior and senior draftsmen; make their interests thine. Think back to thine own days of youth with all youth's ambitions. Then watch salaries and in justice advance the boys without their call. Never wait.

(5) Do not kill youth's chances. Be honest with thine employees. Laying them off on short notice is not being honest with them. A sacrifice for them will pay thee.

(6) Accept thy "bulls" as thine own "bulls." "Bulls" in the drafting room to be diplomatically treated. Always distinguish the "goat" even if thou art the "goat."

(7) Do not steal or put temptation before thy neighbor's employees; remember thy neighbor has been patiently developing them to bring them where they are.

(8) Bear not false witness to thy neighbor's work.

(9) Good or bad, try to benefit from thy neighbor's work. Remember that nearly all of us do both good and bad work.

(10) Honor and give credit always but collect thine own dues.

From Aymar Embury II, Architect, New York

YOUR letter asking me to write you an informal letter for publication on the human element in the architect's office arrived this morning. I am glad to send my opinion for your symposium.

In the first place, the problem of a little organization such as mine is very different from that in a large one. The architect is in very close touch with his drafting room and wants friends in it, so that nobody works for me very long that I do not think of as a friend, and as I find that the best team work is to be gotten out of an organization of friends no one stays in the office who is not liked by the other people in it. Everybody has his own way of managing, but I further believe that this is the best way of getting good results. In the first place, half a person's waking time is spent where he works and it is certainly desirable to make that time as happy as any labor can be, and people work better under these conditions.

The second thing that I believe necessary to a good organization is a thorough understanding of his status by the employee. Everybody in this office knows that they are employed because their work brings me a profit and if it doesn't bring me a profit they will not continue to be employed. They also understand that I do not wish any sentiment of loyalty to their employer to stand in the way of their advancement. If a man has a chance to get out for himself, I want him to do it, or if he can make a change to an office where he has a bigger opportunity and better salary I want him to do that; and this purely businesslike view of the situation is not incompatible with a thoroughly friendly spirit as long as he is in the office.

I like the men and women that work for me and I think they like me. They all work hard. They all know all about my business and in consequence they know that the money I am making does not bear too great a proportion to that which they are making, and the result is that we get out the work with as little friction as I have seen in any office and as rapidly as it can be done well. A big office could not be run on these lines. A small office can.

From James S. Angus Mercer, State Department of Architecture, Albany.

IN REGARD to "The Human Element in the Architect's Organization" I would say broadly early education is the crux, implying (1) fitness and (2) means to gain a knowledge of architecture. These essentials may be embraced under a system of apprenticeship, say three months probation, then if guardian, pupil and architect are agreed, a legal indenture specifying obligations of each party, years of service, duties, salary, etc., each performing his part in its due fulfillment. In the interim, attend evening art and science classes for science, lectures, advanced line, freehand, cast and life studies. At the expiration of pupilage term go to college, or travel for sketching, measuring and plotting reputable good Modern or Old Buildings, or parts of them, return and enter best possible office for general practice and more practical office work.

This outline would create this so much to be desired co-operative or "community of interest" spirit, exemplifying it beyond words and an inspiration for the best in architecture.

You can picture the effectiveness of an office "team" co-elaborating on some serious project also the obverse of one working as we do to-day with men untravelled and untutored thoroughly in the fundamentals as a preliminary in their early training, especially if the chiefs are in the latter catagory.

Unfortunately the "dollar" is the desideratum with too many, not the love of the beautiful in forms, mouldings, ornament, and detail. To *copy well* as an exercise is one of the best tests of patience during pupilage, also *to apply* good examples in a new project are habits to be carefully cultivated, the spirit of compromise, keeping an open mind to learn, encouragement with a word of commendation or reproof when deserved without temper, permit and encourage discussion or criticism with client, committee, a commission on any project under study in your care, inspection of buildings under construction, occasional conferences with staff on serious business, cultivation of the social side in every way possible for good fellowship sake.

Other matters would surely develop as time goes on and if some such system were followed would redound to the general good of any organization, is my humble belief and experience.

By Alfred C. Bossom, Architect, New York.

YOUR letter regarding "The Human Element in the Architect's Oragnization" reminds me of a condition I encountered while acting for one of the very largest banks here. Every morning they had an executive committee meeting at which all of the Officers sat in with the President for about fifteen minutes to discuss the problems. The President referring to this situation said he would rather handle a team of prima donnas, as the human element entered into the situation so strongly. Several of the officers of the bank when speaking of these daily meetings asked each other in a jocular vein where they had been bitten that day, was it the leg or the arm?

In other words, the human element is unquestionably vital in any activity where mentality is essential. The handling of an architectural force in my experience is not an easy matter, for all the different temperaments which go through the entire human gamut in outward demonstration practically all have the underlying sentimental control which makes the use of kid gloves indispensable.

Also, an architectural office is at times frightfully busy and rushed, and at other times comparatively idle, again making it imperative that during slack times the general spirit of the office must be maintained and not allow demoralization that is often liable to creep in and hamper results seriously when the unfortunate, but apparently inevitable rush comes.

To get this result we have endeavored to so subdivide and team our work that all the way down the line there is no acrimonious antagonism, but friendly competition, so that without hurting feelings each man feels that he is being particularly observed, that the efforts he makes will not be wasted. Also, we make a very decided effort to definitely reward conscientious effort in no matter which department of the office it may occur.

Of course, in the handling of large banks, office buildings or hotels, such as we do, the amount of detailed work involved is tremendous at times, and it is by this form of team play that we are able to get it out without falling back on the somewhat mechanical methods which have taken the joy out of life for so many architectural draftsmen.

Architecture is almost the reverse of a great many other activities in so many of which it is usual to have the job and then find the man for it, whereas, in an architect's office it is getting your man and then putting him into the niche where he can do greatest justice to himself, and the Human Element in Architecture is that which gives life to art.

By Thomas Hastings, New York

THE architect is related to his work, or should be, very much as the painter and sculptor are related to their work. The man who merely directs his work without working himself never progresses and it is just as inexcusable for an architect to carry on his work in that way as it would be for a painter to employ others to do his painting for him. The most important thing for an architect in his personal relation to his men, is that he himself should be a draftsman and continuously and always draw, not only studies, but scale drawings and even working drawings at a large scale. It is only in this way that he can hope to progress and only so can the public expect to find any relation between his successes and his failures. No man in art ever arrives at the highest level every time, but anyone who understands and appreciates the direction of his work sees the relation of his failures to his successes, and I always have felt that I can tell from the work of an architect whether he himself has been the controlling influence by being a draftsman or whether his work is entirely dependent upon the staff and character of the men at different times in his employ.

A man's T-square and triangle and his pencil point are the instruments of his art, they are to the architect what the brush and the chisel are to the painter and the sculptor. As soon as a man loses his facility of expression he loses his capacity to design properly and to solve practical problems. There is a great temptation, with a large organization and much work to do, to delegate it all to clever draftsmen. Of course no man with much practice can do it all and, in my opinion, more credit should be given to the men who assist than usually obtains.

The personality of the architect should always show itself in his work even through his draftsmen, and the latter should feel that they are working *with him* and not merely for him. The relation of an architect to his draftsmen can in this way only be happy and successful and only so can he count himself among the living artists of his time. For the proof of this statement one need only inquire as to the methods of working of the architects whose names are recorded in the history of art.

Regarding the men of an architect's organization in their relations to one another, I feel it of very great importance that the stronger man should have control of a few others less able, they to help him and he to direct them. It is the old principle of apprenticeship which applies in an architect's office, as it did in the past. A draftsman learns best from his superiors by working together in the most friendly way, with free and open discussion encouraged by the architect himself. Draftsmen are not usually allowed to come enough in personal contact with each other and to talk things over and to criticize each other's work. "Every man for himself" is a bad law in an architect's office. The practical man should be consulted and the artist should advise the practical man, in a spirit of co-operation, otherwise the problem will not be properly solved.

False dignity often prevents proper contact. There should be no "boss" in an architect's office, not even the architect himself. The spirit of companionship and proper relationship should be encouraged to its fullest extent. However, even though this relationship may exist to its fullest extent, the architect should show absolute control of the direction of his work; his personality should dominate and be clearly evident in his work when it comes before the public.

From Harry D. Payne, of the Office of Wm. B. Ittner, St. Louis, Mo.

WM. B. ITTNER has taken the position in the Institute and before the profession at large that it is one of the important functions of the present generation of Architects to give to the Nation a new generation of Architects competent to lead in the future development of American Architecture and capable of dealing with its many intricacies. To this end, the office of Wm. B. Ittner has always welcomed the boy who desired to enter as an apprentice as well as the young graduate anxious to perfect his practical knowledge. To such it stands as an office of opportunity. The so called "plan factory" methods do not prevail, each man being given an opportunity to develop in all the branches of an Architect's work: sketches, working drawings, detailing and even in the preparation of models for carved and cast work. The men are not limited in the scope of their endeavors, but each assignment of work must be efficiently executed. The men of more mature experience in the work are the coaches for the novice.

There is no real occasion for friction or jealousy between the men since each one realizes the strong points of the others, assists in the elimination of weaknesses and then all combine in earnest effort to produce successful designs. I do not mean to imply that the structural and mechanical engineers do not occasionally trample on the toes of the architectural men, but that is in the day's work. This leads to the point that the development in the same office of all the varying phases of a complete building project is a considerable factor in the creation and education of a dexterous, capable Architect.

It is Mr. Ittner's belief that the system of making each man realize his importance as a factor in the completed design has tended toward the successful conclusion of many commissions.

During the past year an insurance policy has been taken out for each man, the benefits accruing therefrom being made payable to a beneficiary designated by him. This protection has been extended to superintendents at the various projects throughout the country.

To sum up the foregoing, the effort has been to develop the capabilities of each man and in so doing, to serve the best interests of the client and of Architecture.

From J. E. Wood, Capt. Corps of Engineers, U. S. Army, Assistant to Engineer Commissioner, Washington, D. C.

MY OBSERVATION is that the personality of an office is dependant upon that of the dominating figure thereof. The office which has two outstanding figures of strength seldom continues in partnership unless each dominates definite phases of the organization's activities. Many strong firms composed of brilliant personnel have dissolved through contesting personalities.

As members of an organization must be complementary one to the other, so must the entire office operate. In a large office one finds every type of personality, disposition and ability. Some must be driven and others must be led. The successful office has at its head a man who secures the maximum results either through the strength of his own personality or through the thorough understanding of his subordinates.

From Lawrence & Hoford, Architects, Portland, Oregon

ARCHITECTURE, as well as Democracy, is an undertaking of a co-operative nature. While society has come to recognize the so-called architect as responsible for his building, it cannot be overlooked that, in reality, the result is made possible by a large number of men, co-operating. This conception of the problem carries the architect's obligation beyond his own immediate organization into the ranks of the contractors and craftsmen, and is too apt to engender a minimizing of his obligation to his own force.

In fairness, it has always seemed to the writer, that the architects' organization should recognize the leaders in the organization by publishing their names on firm letter-heads, etc. A system of profit sharing amplifies the spirit of fair play and confidence essential to real co-operation. Conferences between the force and members of the firm are always helpful—where free discussion of office methods and results of office undertakings are entered into.

It seems to the writer that the danger of the office is specialization and that, as an antidote to this, the designers should be given an opportunity to visit the work in construction and that the superintendent and engineer should be early brought in touch with the design work.

An architect, with a real vision of his great profession, should give personal attention to the progress of his men. He too seldom realizes that the men in his employ, who are to be the future architects of his community, are permanently influenced by his own standards of ethics, design and construction.

No city should be without its architectural club, which the practicing architects of the community should support freely with their money, their time and their interest.

The modern architect, if he is to survive the dangers which threaten his profession, must learn the lesson of co-operation. He must realize the functions and the rights of all the elements in the building industry. He should lead in reforms, but he has too long played the role of dictator. His isolation has been especially marked in his failure to fraternize with the craftsmen who erect his buildings, and who of all the men in the industry, can be most useful in carrying out his standards of construction and of design.

Strong as these obligations are, they are, however, not comparable in the last analysis, with the obligation of the architect to his own draftsmen.

From Electus D. Litchfield, & Rogers, Architects, New York

IT HAS always been my theory that the most successful results in architecture are only obtained by the whole office acting as one man, with each individual in his particular sphere, from the conception of the work to its completion, doing his utmost to make each element of the design and construction absolutely its best possible. In an organization guided by this principle, there is bound to be difference of opinion and at times friction; which after all is perhaps not unhealthy, for it is only when the principle is not appreciated that hard feelings develop. The individual who is not broad enough to appreciate the principle is only a hindrance in an active architectural organization.

From Albert Kelsey, Architect, Philadelphia.

RESPONDING to your letter, I would say that my office is so small that it is easy to maintain the human element while working out all problems that I may have to solve. But I might say, in looking back over a period of between twenty-five and thirty years, that this office has been a happy home for the few draftsmen I have employed, and it is a source of great satisfaction to me that so many of them have succeeded after leaving. I attribute this happy state of affairs to the close personal relations existing between us and to the fact that I have always encouraged draftsmen to join the T-Square Club and to strive to take the course at the University of Pennsylvania. With the result that they have felt their future depended somewhat upon following my advice, and feeling so have worked with me with unusual loyalty and spirit.

Another point which is not as far away from the subject as might be supposed, might be dwelt upon with advantage to the profession, and that is that the best architecture is always produced by the most generous architects and those least afraid of each other. In support of this, let me call attention to the little group of architects that broke away from the old order of things some thirty years ago here in Philadelphia, and at length made the local Chapter of the Institute of some importance. In those days the meetings used to be held in different architects' offices and it is my sincere belief that the greatest benefit derived from attendance came through prowling about through another architect's drafting room and through learning his ways and methods.

Now, while your excellent journal is published almost exclusively in the interest of draftsmen, most of them nevertheless look forward to the time when they may be taken into the firm or start out for themselves. Therefore, it is my belief that to get the most out of a man you must show him that you are sincerely interested in his future and always anxious to lend him a helping hand.

From John Mead Howells, Architect, New York

I FEAR I may have nothing that will sound original to contribute to your symposium.

Through my connection with Diplomés Society and with the Society of Beaux-Arts Architects I have been particularly interested in seeing young designers, especially many who could not even go to college, sent abroad or led directly into professional offices. Many, of course, are in offices already and combine their work there with the Beaux-Arts work.

It is interesting to see a man of this type, a few years later, pass out of the drafting room arm in arm with some practical specification-writing friend, and start in his own practice.

It is an uncomfortable fact that some of these men sometimes find they cannot sustain an office through the lack, I suppose, of a wide and influential enough acquaintance in the town where they start. If they can bridge over this period by winning a competition or two they usually get a foothold.

From D. Everett Waid, Architect, New York

IN ANSWER to your question I would say that the human element is as important in the office as in the home. The largest portion of each person's time and energy is expended in the hours devoted to work. If the relationship during that time is not human in the highest sense it means that life is a failure.

I like to think of an architect's organization as his office family. If he does not take some active interest in the personal welfare and ambitions of each member he is not living up to his duty. On the other hand if they are not concerned about the work turned out by the office, beyond its function as a salary producer, they are only machines and are missing the meaning of real loyalty to self and to each other.

Perhaps other architects can confess failure in as large degree as do I. But, too, we may think we know a few things which we ought to try to do. Give us credit at least for good intentions. One of these is a financial dividend (not a "bonus") varying with the success of the year's business and based in some fair way on earnings, length of service and interest in the office and fellow employees.

Another matter in which the architect may wisely take an interest in disability and life insurance for each one of his organization.

The obligation which perhaps rests most strongly on every practising architect and the one which he most often fails to discharge is that of giving every potential practitioner in his office an all around experience instead of keeping him in a rut. The Board of Registration could quote many instances of brilliant young graduates in architecture who have been three years in subsequent office work and still remain totally ignorant of many qualifications essential for them to possess in the independent practice of architecture.

From Lionel Moses, New York City

A LITTLE incident in which the writer once figured seems to embody so well a number of essentials of the problem of the human element in the architect's organization, as to be worth relating, though it is not directly in the field of architectural practice.

A long time ago—let us say twenty years more or less—the writer was charged with the duty of obtaining, at very short notice, a zinc plate of a drawing so that a hundred prints could be made for distribution within forty-eight hours.

It was natural that he should go to the largest and best concern he knew to obtain quick results; but a telephone message brought the reply that they were too busy and that a firm whose name was given might do the job.

The "too busy" firm gave up business about a year ago, publishing the fact that the class of trade which they sought did not afford sufficient support for them to carry on. The little concern then on the third and fourth floors of a converted house in Union Square is now the proud possessor of an establishment of considerable size and, from all appearances, is very successful.

We may forget the firm which has gone out of business. There is no moral to adorn our tale so far as it is concerned. They probably cashed in and paid a hundred cents on the dollar and the name of the firm's founder will always remain in the annals of printing. It is the other firm that is of interest because of the memorable experience attached to it. The writer after obtaining the address of the little concern, with his rather large drawing under his arm, jumped into a hansom and in a few minutes was dropped at the entrance of the Union Square establishment. On entering a door two flights up, he was greeted by a man somewhat younger than middle age who, without any preliminaries asked the question, "What can we do for you?" (I learned later that he was the boss helping out the office boy.) On hearing what was needed he simply said, "Go upstairs and tell Tommy." Upstairs was a busy place with four young men bustling about, doing things. "Where's

Tommy," said the visitor. Tommy was under the focusing cloth of a camera. His head popped out; he called one of the other boys to "finish focusing that camera"; and said, "What can we do for you?" That was the second time the same words had been spoken within three minutes. Both times the idea was conveyed that "do" was the central and guiding thought. "We" and "do" are a wonderful pair of words. "Can you do so and so?" (to Tommy). "Sure," answered Tommy. Then ensued as pretty a piece of team work as a Yale football team could boast. While the drawing was being unwrapped one of the boys pulled forward the board on which the drawing was to be tacked. Another dragged a camera (not the one that Tommy had been using) into position and by the time it had been focused, a plate holder was handed the protographer (Tommy) and the exposure was made.

After seeing negatives developed the writer left with the drawing, having arranged that the zinc plate would be delivered at nine o'clock next day. It was, even though Tommy and a helper had to work overtime to produce the result. The finished prints were made the following day and sent to their destination. Why they were wanted on that day the writer never, by the way, learned. But anyway, the job was done, thanks to Tommy and his side partners.

On returning to the office at 5:15, having been away for an hour or so, there were found to be notices of two telephone calls on the writer's desk, but the operator had in one case gotten the name so incorrectly as to make it impossible to identify the caller and in the other case the name could have been any one of a dozen persons known to the office. There was no telephone number of either slip. The operator had left and was probably on the 5:15 for "Nutclair" to attend to the first duty of a commuter which, as everyone knows, is to rake and coal the furnace.

All of which reminds one of the "message to Garcia," part of this story being similar and the remainder so different.

And in passing one might recommend this little tale to every architect, for his library. (The booklet is in all the public libraries.)

Co-operation should start at the outside office.

It should end with the boss. It often ends before it reaches any where near him and cases have been known where it ends just at him even when, in rare cases, it gets to him.

Schemes and plans of running an office "efficiently" generally become top heavy. An office cannot run automatically, but co-operation can be made automatic if, among other things the pervading spirit is one founded on a tolerance of the "different" personality which is inherent in the other fellow, and due regard taken of his (and one's own) abilities and short comings. Tolerance engenders sympathy for and from another (bosses please take notice). It is more than mere studied politeness.

Co-operation rests on willingness at any time to help the other fellow. If you are willing to help him he will be willing to help you. Both need it sometime or other. Be willing to give help all the time and you'll get help at the time you need it most. If you are not too busy to attend to business (even if it is the other fellow's) neither will he be too busy when you need him. If you are temperamental keep it for your work. Don't use it up on your co-laborer (bosses please take notice).

And so one could go on indefinitely composing and quoting adages, some of which might sometimes be taken to heart and acted upon.

All the same in proportion to the number of times the above few adages (and some others which everyone can bring to mind) are acted upon just so often will successful co-operation result and co-operation is like mortar in the wall (the modern wall, not the Parthenon and similar). Anyway, "What can we do for you?" will help some if we really mean it.

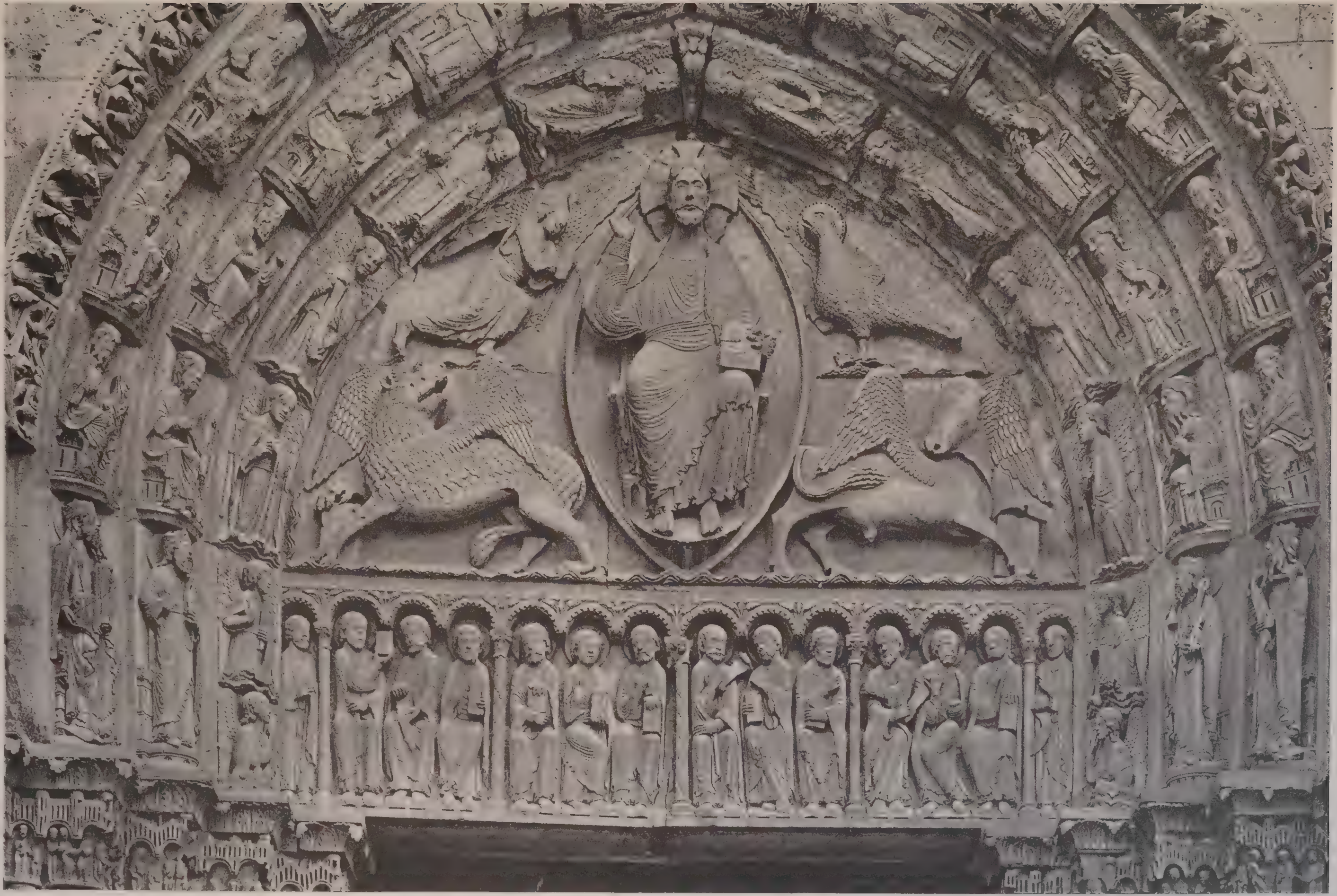
From Smith & Walker, Architects, Boston, Mass.

IN THIS office, which is a small one, employing only a few draftsmen, "the human element in the architect's organization" has not been a serious problem, particularly since both members of the firm are not so far removed from the draftsman's point of view as to render them out of sympathy with the problems of the employee.

In general, we have tried to make it clear to our men that we consider their interests ours, just as we expect them to consider our interests theirs: that we do not propose to "hire and fire," but that a position with us is reasonably permanent if services are loyally given, and that increases of salary will be given voluntarily by us always when they are honestly earned and appropriate.

We are glad to help our men with their outside problems, encourage them to undertake work on the side, insofar as it does not interfere with office time, and when they have gone as far as they can with us, do our utmost to place them in offices where the opportunities are greater and more remunerative. We have always been glad to have them use our office facilities and equipment outside of hours for the working out of student problems, competitions and outside work.

It is evident to us that the better type of architectural draftsman is recruited from a very special class of men, usually of a sensitive and refined sort, and in general we feel certain that such men must be given the consideration commensurate with the services they are expected to render. A time clock system is obviously unsuited to the conditions prevailing in an architectural office of modern tendencies, and there is no doubt in our minds but that the best results are obtainable through honest co-operation and the sympathetic handling of each individual whose work has a definite bearing on the output of the firm he serves.



CHARTRES CATHEDRAL. DETAIL OF PORTAL.
FROM "SELECTED MONUMENTS OF FRENCH GOTHIC ARCHITECTURE"

Some of the beautiful detail of Chartres Cathedral is well shown in the plate reproduced on the other side of this sheet from "Selected Monuments of French Gothic Architecture," to be issued shortly by the publishers of this journal. This photograph and other plates in this collection are from the archives of the French Commission of Historic Monuments.

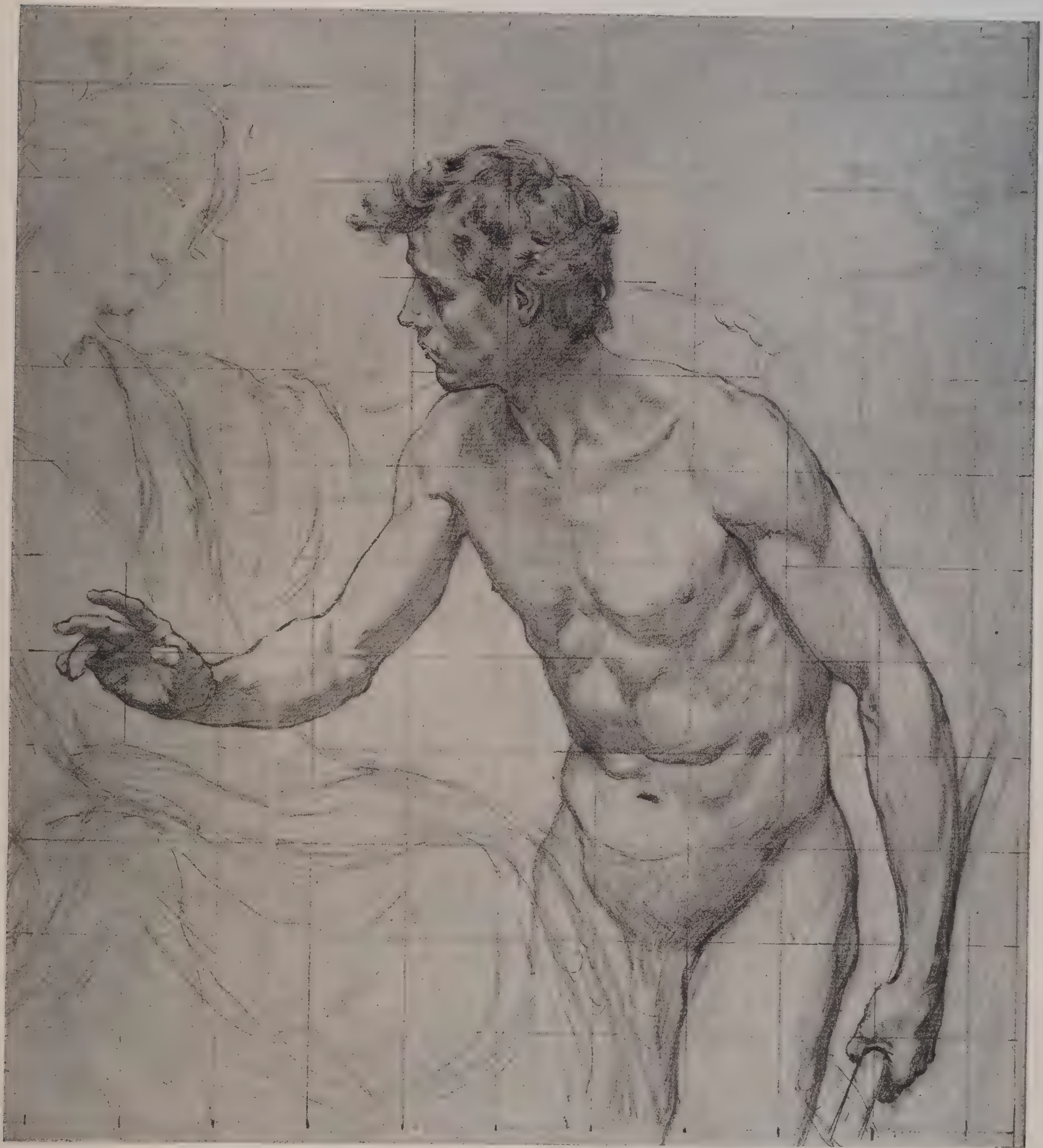
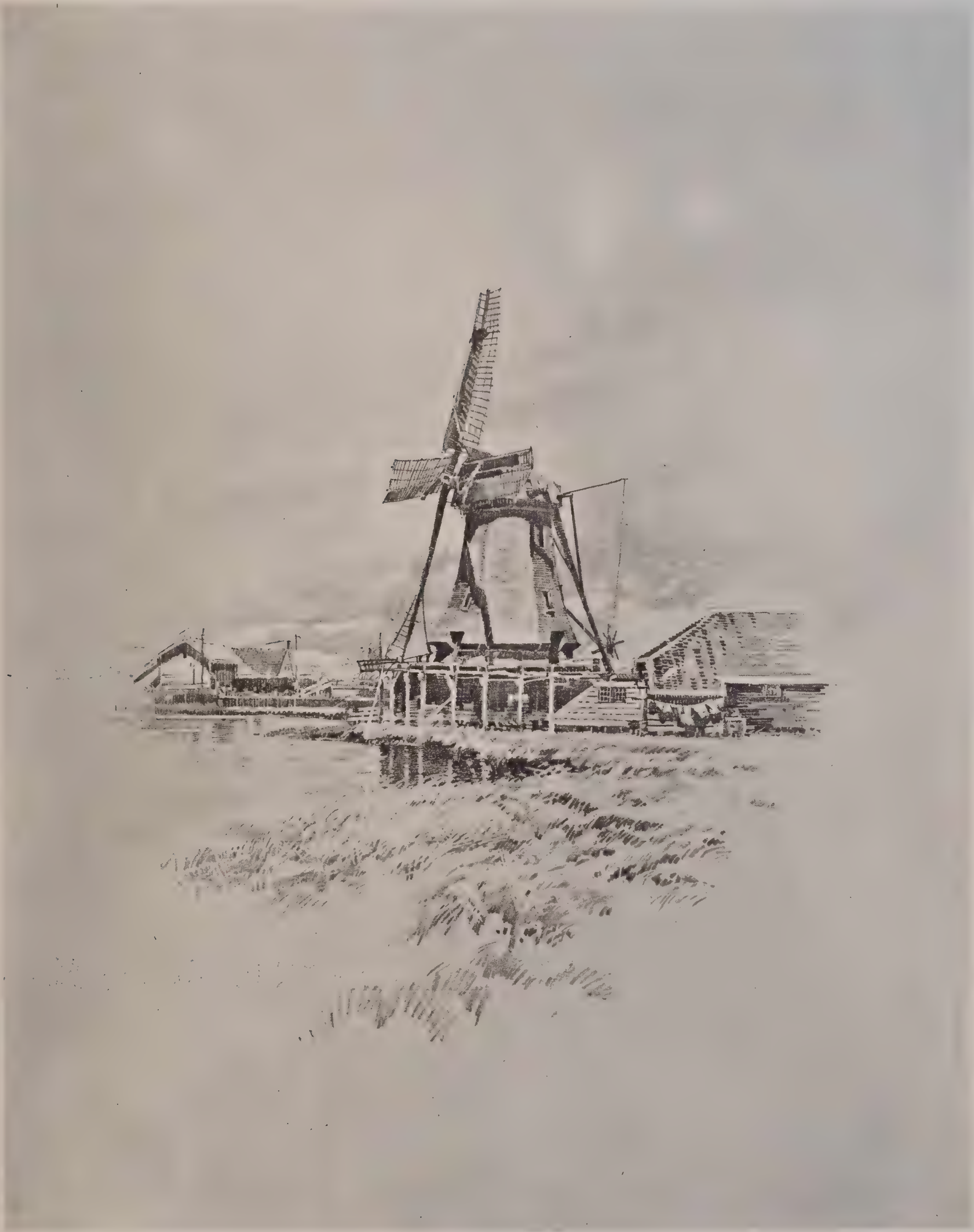


FIGURE DRAWING BY KENYON COX

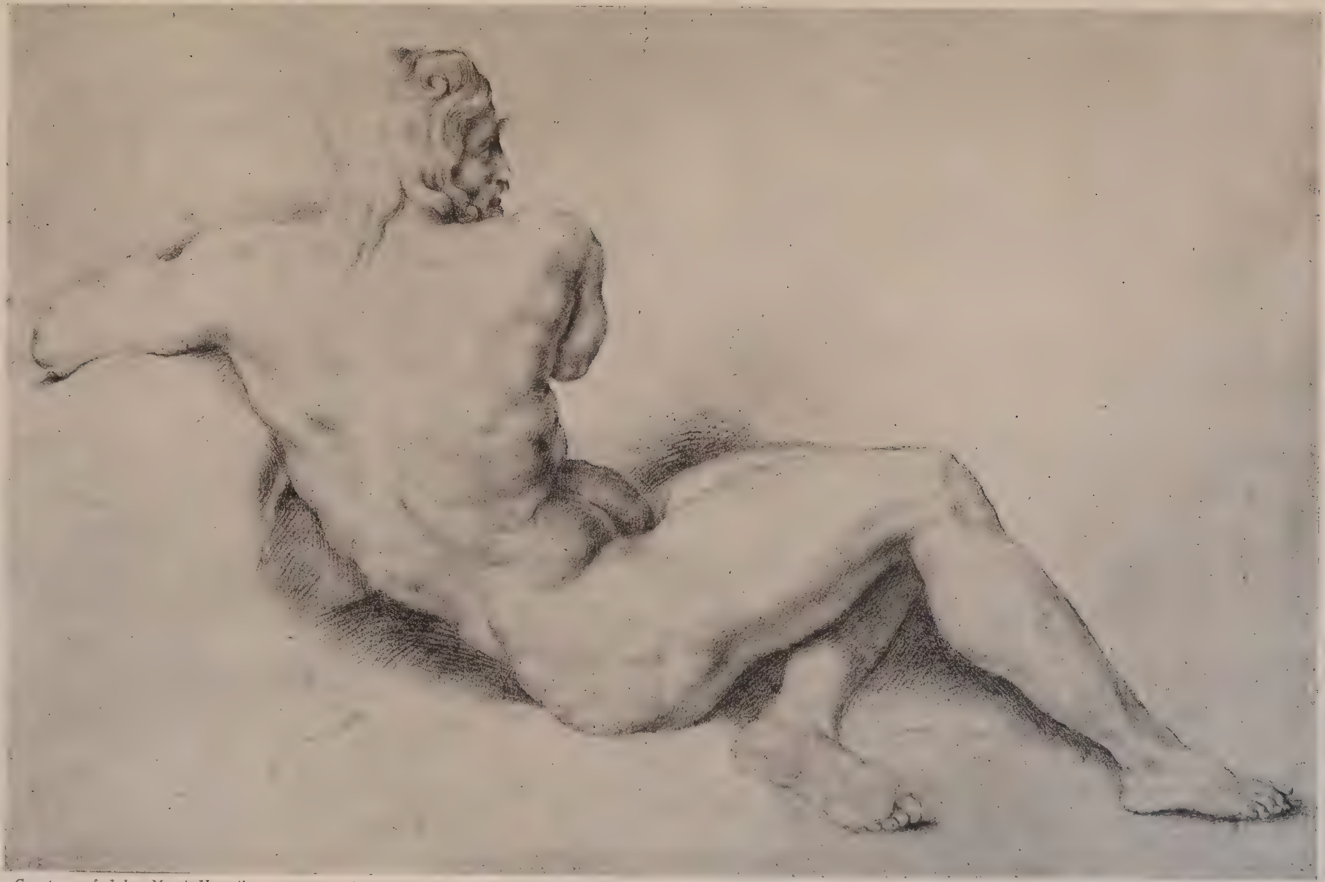
One of the many remarkably fine figure drawings made by the late Kenyon Cox as studies for his mural paintings is reproduced on the other side of this sheet. This drawing and other drawings by this artist that have been shown in this journal from time to time were loaned for the purpose by Mrs. Cox.



Courtesy of G. Dewey Swan.

PENCIL SKETCH BY F. E. GETTY

Through the courtesy of G. Dewey Swan, of Boston, who loaned us the original drawing, we reproduce on the other side of this sheet an unusually pleasing pencil drawing by F. E. Getty. It is excellent in technique and in pictorial quality.



Courtesy of John Mead Howells

OLD ITALIAN DRAWING IN RED CHALK

On the other side of this sheet is reproduced an old Italian figure drawing from the collection of John Mead Howells. The name of the artist is not known. The drawing was acquired by Mr. Howells on one of his visits to Italy and is of unusual interest because of the skill and delicacy of touch shown in the technique and the excellence of the rendering of anatomy. It will be noted that all tones are composed of hatching of lines that are clear and fine.

MASTER DRAFTSMEN, PART I

STANFORD WHITE

1853-1906

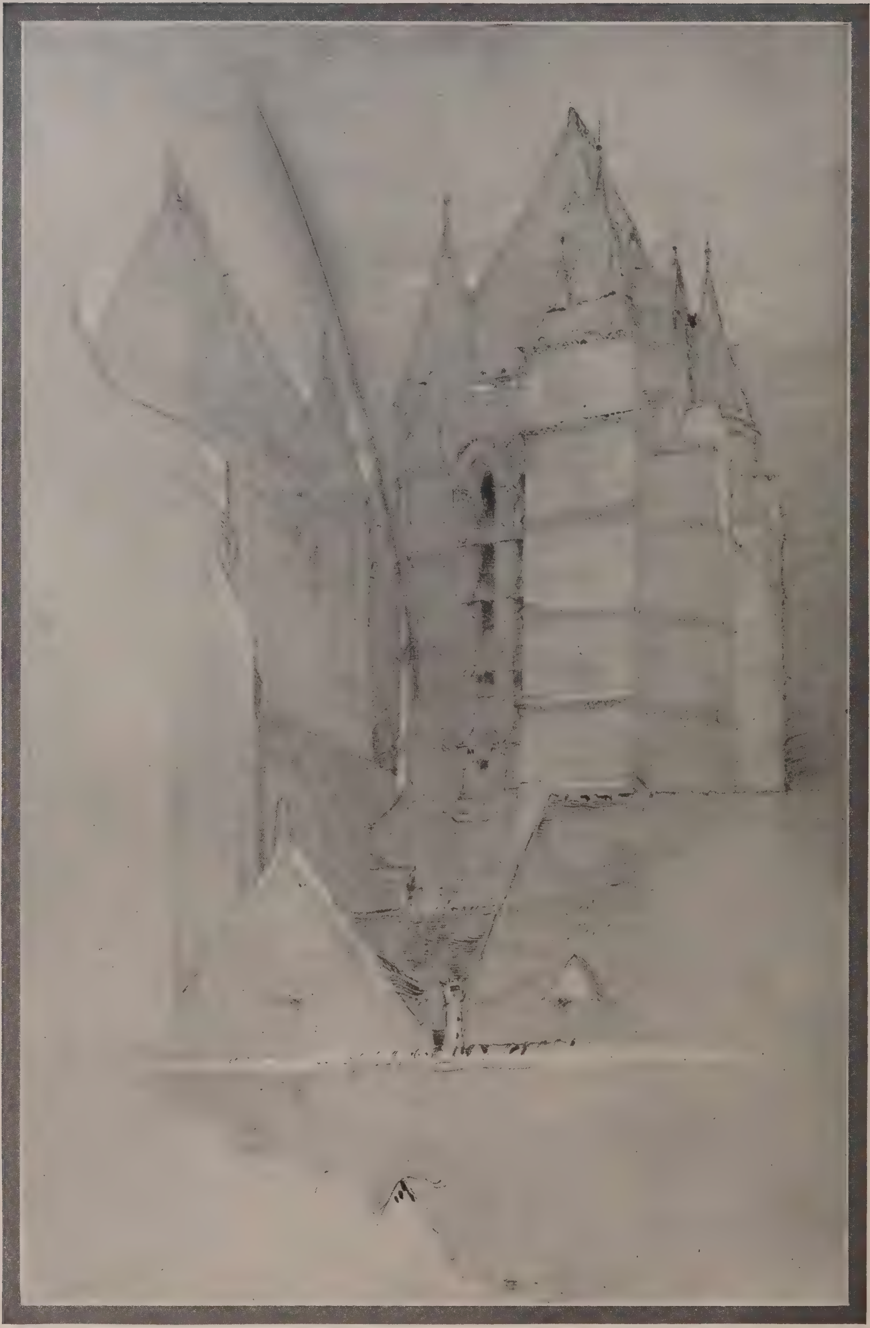
CURRENT reputation of living artists and that of those of the past generation—bound up so much as it is with fashion and somewhat obscured or exaggerated by the conventional cant and eulogies which always follow upon the death of recent luminaries—causes any attempt at judgment upon the work of the men about us or those we have known to go little further than individual opinion. Each of us has his own opinion, more or less definite, of all the people about us, and of their work and doings. Such opinion in ninety-nine out of a hundred cases improves as we know more intimately the man and his work—provided we have not in our imaginations deified the being to the point of disillusionment. Until the personality of a man has passed beyond the memory of every living human being anything approaching permanent reputation as to his works—anything that may find its way into the histories of art to be written for future generations—is in the melting-pot. Mixed with his reputation as an artist there is always a quantity of gossip, anecdote and matter of human interest that is inseparable for the time being. There could be no point in trying to separate it. Should we find half the interest in the work of Benvenuto Cellini, beautiful as we must all rceognize it to be, without having read his fascinating autobiography. The contents of the "melting-pot" may be stirred—more or less clarification may result from slight additions to its content—that is about all. The more we know of the human qualities of an artist the more we are likely to find ourselves in sympathy with his aspirations. The commentator may point to things interesting to himself, or which he has observed as interesting to the men about him and thinks for such reasons, that they may be found interesting to others.

Stanford White

The trite proverb that "A good artist is always a good fellow," which has come down from at least Thackeray's time, I have heard repeated by men of such exceptional opportunities for observation as Frank Millet and Sir William Horne. In each case hope that it might be so, may have fathered the expression (so far as my estimation goes the hope might well be gratified, for I found them both good artists and good fellows)—but which of us with even a moderately wide acquaintance among the recognized artists of our time fails to note that many lack the essential qualities of good fellowship in being a compound of conceit, vanity and narrowness. Fortunately, however, such "exceptions prove the rule," and from the great many to whom, in my opinion it applies in the most favorable sense, have been drawn the subjects of these essays on "Master Draftsmen."

Sir William was speaking of Stanford White when he repeated the proverb quoted above; and in describing the making of plans for the building of the Mount Royal Club, at Montreal, branched off into stories about White, the man and the artist, soon forgot "the plans" and told of White's lively personality and interest in pictures, jewelry, rugs, lamps, books and their covers, etc. and said, "It didn't matter what we discussed or whether it was art or the draft-gear of a freight train, fishing or canoeing, he soon took the lead in the conversation. In his enthusiasm his voice rose like a bag-pipe."

Of my personal observation, one or two anecdotes



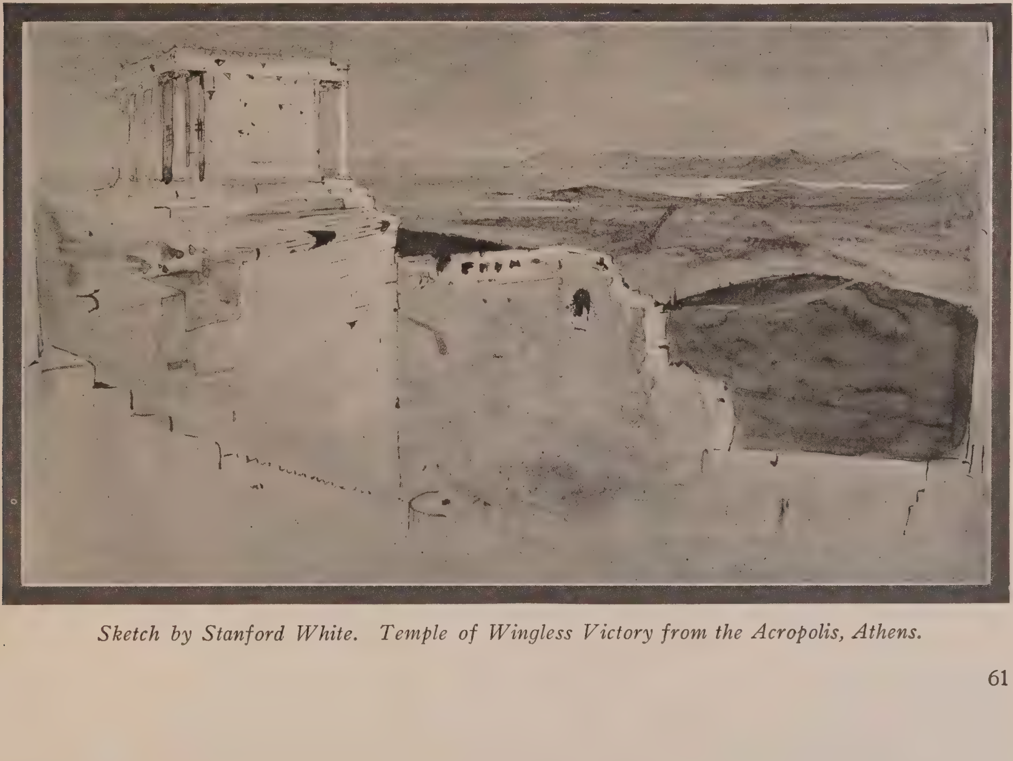
Sketch by Stanford White. Cathedral Tower, Noyon.

may help in the sketch of the man. He came one day during lunch hour to a decorator's office in New York, where I was employed as a young draftsman, to see a detail drawing that had been made by Thomas Johnson, while the latter was out at lunch. Somehow his large energetic figure, dominating, intense personality, seemed to fill the whole office. "Beautiful!" he exclaimed, "fine as the Parthenon!" Then, after a second, taking up a piece of tracing paper: "Dammit, if it isn't, we'll make it so." He sketched rapidly some alterations to the mouldings and ornament, composed the sketch and detail, crushed the tracing in his hand, dropped it on the floor, said—looking at the original detail:—"Fine! Just as it is," and abruptly rushed off. When Johnson came in, he picked up the ball of crushed tracing paper, did his own comparing, said, "Better," and altered the detail to agree with Mr. White's sketch. "It is a way he has," said "Tom," later in the day.

I have another impression of him when, during a meeting of the Detroit Museum of Art, called to consider a proposed memorial to be built to commemorate the bi-centennial of the founding of Detroit, he was standing on the platform being introduced by the late Mayor Maybury to a sizable audience, including several architects. The Mayor was enthusiastic about Mr. White (he had been with him all day, and I've never even heard of anybody who was not infected with Mr. White's high-powered enthusiasm in half that time). "Mr. White," he said, "is the architect who designed *all the buildings* at the Chicago World's Fair." Something must have suddenly bitten White's moustache, on both sides, for both hands shot to his moustache and brushed it outwards. Wrinkles appeared at the sides of his eyes, and St. Gaudens' description of him as a "red-head" applied for a minute or two from the top of his collar, up. "But he never even peeped!" laughed George D. Mason, who sat next to me. He was "back on the job" in an instant and gravely described the proposals shown by the drawings.

It was the Mayor, however—not he—who described the design as "a Greek Doric column: *the largest in the world*": which drew from Louis Sullivan the humorous, somewhat caustic comment, "They asked their architect to think of a memorial and he thought of 'a Greek Doric Column: the largest in the world.' It is as if I were to ask you to think of an orange and you thought of *a sausage—the largest in the world.*" I imagine that if Mr. Sullivan had been around when Mr. White read that comment he would have learned the point to a saying that "Stanford White didn't have a red head for *nothing.*"

His force and enthusiasm carried forward the impetus that Richardson had given, and Hunt had done so much to develop, in making architecture a part of American civilization. So much so that at the time he passed away it seemed to the writer that what was said of him and his work left no credit to his associates and assistants; yet of whom I had known him to speak as though he felt he would be nothing without them. Once, when I wrote an article in a London paper in which I quoted as nearly as I could recall—and correctly as far as I was informed—a statement that Mr. McKim had made to me to the



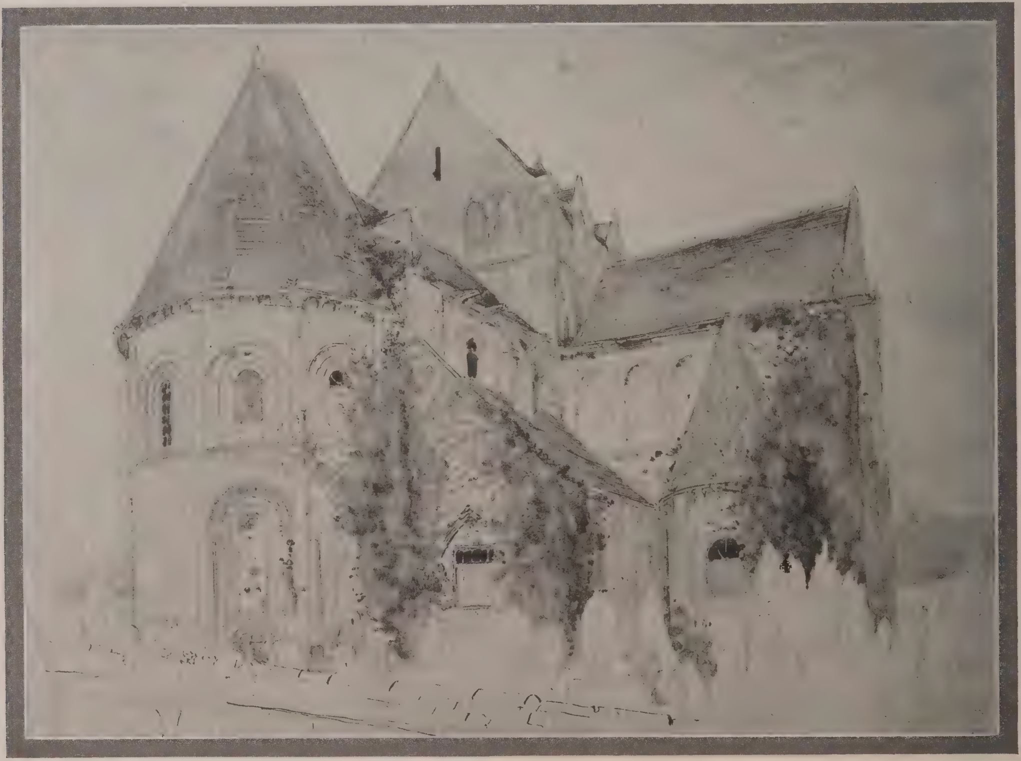
Sketch by Stanford White. Temple of Wingless Victory from the Acropolis, Athens.

effect that some of the men in the office had done as much or more, in developing the judgment of himself and White as ever they had that of their assistants, mentioning among others Cass Gilbert. I received a letter from Mr. Gilbert positively denying the statement and giving his version thus:—"The truth is we were just young fellows working under Stanford White. He was the leader of us all and we looked up to him and admired him, as man and artist, more than I can tell you. It am sure I had no influence upon him whatsoever and I do not think any of the others did either; and loyalty, and truth compel me to say so." When I assured Mr. Gilbert of my authority for my statement, he said: "Oh, that was just Mr. McKim's nice way of saying things; for I have heard him too speak in glowing terms of the ideas of his partners and of the 'young fellows' who worked under him—and I did not fail to understand that the tribute to assistants was, at least partly due—as with Mr. McKim—to generosity."

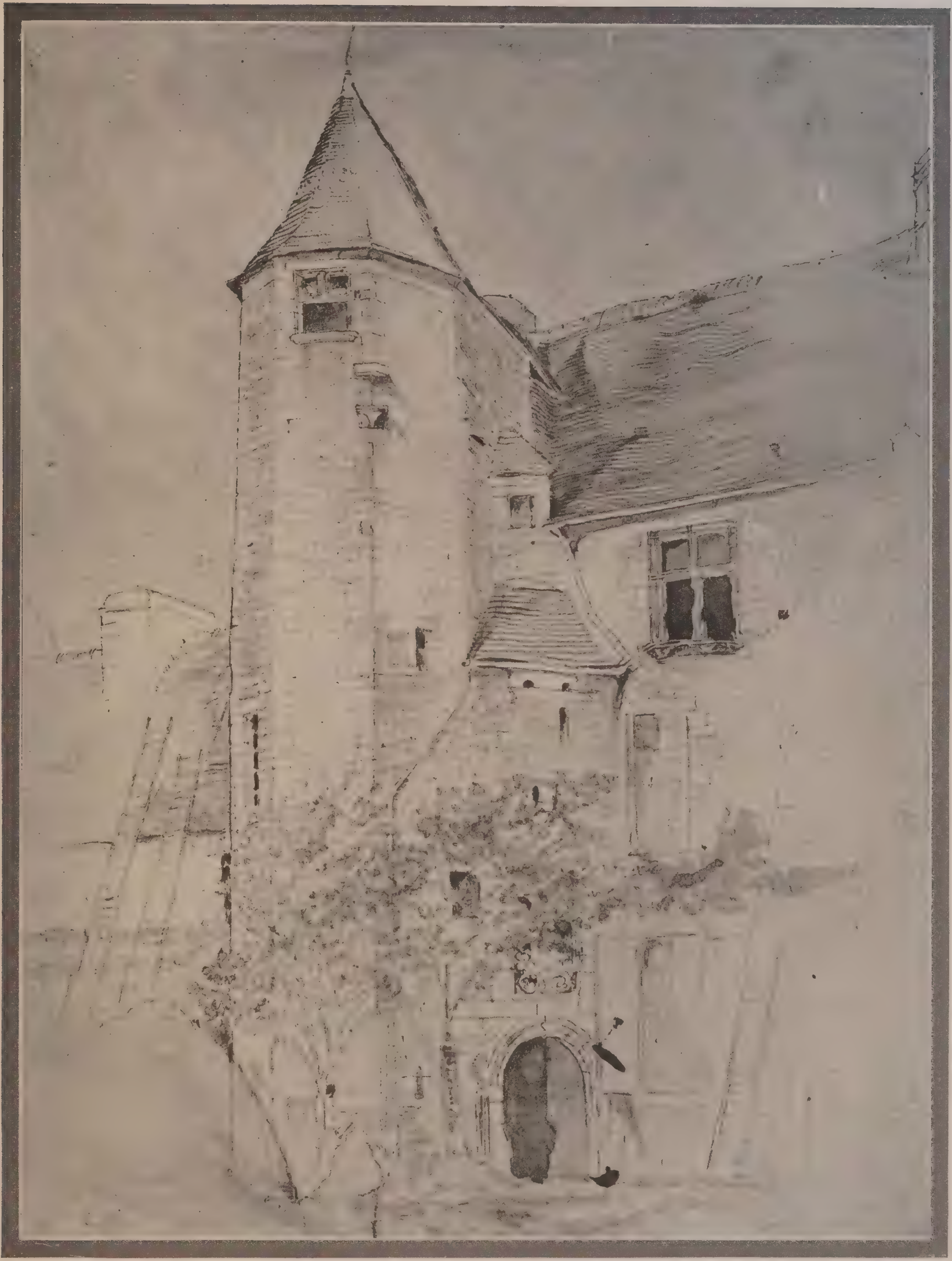
A short time ago Mr. Cass Gilbert told the following story, to a group of architects including Mr. Welles Bosworth and Mr. Lawrence White, of an incident that occurred in the office of Messrs. McKim, Mead and White many years ago when Joseph Morrell Wells was a member of that firm: "Stanford White came rushing into the office with a picture of a small French church in his hand. 'Look here! Mr. Wells,' he exclaimed, 'look, here's something as fine as the Parthenon—*in a way.*' Mr. Wells looked. 'Yes, White,' he replied, 'fried eggs are as fine as the Parthenon—*in a way.*'"

Mr. White's career as a brilliant architect and one of the original association of artists in the great firm of McKim, Mead and White is too well known and appreciated and fresh in the memory of even the youngest of his confrères to require any mention of it here. A delightful collection of correspondence between him and Augustus Saint Gaudens, presented by Homer Saint Gaudens, was published in Volume XXX of the "Architectural Record." Mr. Royal Cortissoz in his book, "American Artists," includes an enthusiastic chapter about him and his work, in which he states: "The best tribute that can be paid to Stanford White is recognition of the influence of his artistic standard upon New York and upon the whole country."

But the most charming record, tribute, and reflection of the sunny light he cast about him is found in the book of "Sketches and Designs with an Outline of His Career, by his son Lawrence Grant White," published in 1920. Mr. Lawrence White says of his father: "On rare occasions when he di-



Sketch by Stanford White. French Romanesque Church.



Sketch by Stanford White. Manoir Saint Marie Aux Anglais.

gressed from architecture he seemed to rejoice in the freedom from the limitations imposed by stone and mortar and to turn with a light heart to the making of beautiful drawings and designs. He applied his genius to widely varied problems and has rightly been called the greatest designer America has ever produced."

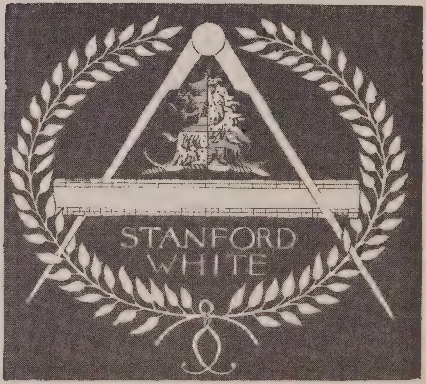
In the latter part of the last sentence some readers will perceive a *naïveté* to be expected of a perfectly natural, altogether human being, writing from a filial point of view. A view that might be expected, too, from the younger artist who has lived all his life in the lumens shed by the elder. Allowance might be readily made for possibly less enthusiasm coming from a hardened *habitué* of the studios and art museums of Europe and America, one somewhat older and whose personal impressions of Stanford White have been received like the flashes from a lighthouse by one on a ship at sea.

But the position of the present writer is like that of a certain "junior counsel" in an important legal case of which an old judge told the following story: "His 'leader' was making a long speech stating the grounds of appeal and stopped to examine his brief. The judge happened to glance at the junior, who promptly said, 'I agree.' The leader looked at him severely; proceeded to talk another five minutes and sat down with an air of finality. As he did so, the junior again spoke up: 'I *still* agree.' "

Mr. Lawrence White states that, early in his career, Stanford White acquired "a keen observation and a sure touch." The studies—they are more than sketches—reproduced herewith, were made in that early period. No process of reproduction can adequately express the fine sense of color or the extreme delicacy of touch displayed in the originals: but the architectural sense of structure, composition of the drawing, indication of texture of material, refined feeling for detail and general excellence of technique will be sufficient to demonstrate that Stanford White was a master draftsman. And a study of the many executed works in architecture and the decorative arts produced from directions given by his pencil will go far to demonstrate the assertion that he "has rightly been called the greatest designer that America has ever produced."

Francis S. Swales

Note. Stanford White's book plate is reproduced below at exact size. It was in solid color and printed in red.



"MOSAICS" IN ACTUAL BUILDINGS

BY JOHN F. HARBESON

In this article Mr. Harbeson continues the discussion of the study of architectural design with special reference to the program of the Beaux-Arts Institute of Design. The articles of this series are intended to assist students in the ateliers and schools where the B. A. I. D. program is followed.—ED.

AFTER doing a number of Beaux Arts projets, and using "Mosaic" on plans to explain the parti, and to help in making the composition in two dimensions what these plans must be to make a convincing presentation, it is well worth while to take for a little while a vacation from the atelier viewpoint to see the use that has been made of mosaic in the buildings of the past, and what use is being made of it in present day buildings. Such an excursion will not only be diverting and interesting, but will give a broader background from which to work again at atelier mosaic, a better understanding of the real truths that underlie this convention, and it will also enlarge one's vocabulary of forms that may be used in this way, and give new ideas as to how all of the forms may be used.

While doing this research work we must bear in mind that "mosaic" as used on plans *is* a convention, and that while we use floor pattern here, and a ceiling there, in some places we will use arrangements that are purely conventional and are not taken from actual building, such as the half-circle frequently put at openings to carry the "white" in and express the idea of an opening through which one may enter, and such as the lines connecting each pair of trees when two rows of trees form a vista. So, when we look up historical examples of mosaic it is not with the idea of making our plan mosaic fit into historical or practical clothing, but to give new elements that we may fit into our conventions, for greater variety and interest. As explained before, the primary use of mosaic in a projet is to help explain the scheme; a showing of only such patterns as would be suitable for building into floor or ceiling would frequently defeat this purpose. A projet is not—should not be—either a working drawing or a "measured drawing," as we use this term to mean a statement of executed work.

There was probably some thought spent on floor patterns almost as soon as man painted or chiselled decoration on the walls of his buildings. By the time Greek culture was in the ascendant these pavement forms were already intricate and costly in some of the temples.

The Parthenon had, very probably, a simple floor of marble slabs (Fig. 1), but these were slabs of Pentelic marble—rich in quality, even in color, fine in grain, and were no doubt fitted together with that remarkable exactness and precision that characterizes the stone work of the wall and columns.

In the Greek colonies, where marbles of such fineness were not to be had, the floors were made of smaller bits of stone and marble, arranged in patterned forms, such as that of the temple at Selinonte shown in Fig. 2. In some cases these patterns were exceedingly elaborate as in the Temple of Jupiter Olympus at Olympia (Fig. 3) where parts of the floor are lace-like in character. In both of these examples it is well to note the great variety of patterns used, some quite geometrical, others not at all so. Of course, these are "restorations" of the plans of these temples, but they are based on existing fragments and on coins and other documents of the period.

Roman art was an extension of the Greek culture, and the same pavement forms were used, a little stiffer in composition. The richness of the various pavements of the circular pavilion at Hadrian's villa (Fig. 4) is lost in reproduction. Much of the effect was obtained by pieces of marble of many different colors which was exquisitely shown in this clever drawing, but are here, of course, simply different kinds of gray. The pavements of the Women's Baths at Hadrian's Villa (Fig. 5) have more of the freer forms found in the Greek examples, but these, too, were carried out in an infinite variety of color. If we turn for a moment to the winning plan of the 1923 LeBrun Scholarship Competition (Page 53, PENCIL POINTS for May, 1923) we see how some of these forms have been used in a recent presentation.

The early Christians used floors based on the same principle (Fig. 6), but in these the pieces were larger. The designs were usually geometrical, but in great variety; frequently there was no attempt to make opposite sides of a floor identical in design. This example, The Church of S. Clemente at Rome, shows how columns from a number of old Roman temples were incorporated in one design—sometimes with a cap or base a few sizes too large, or with a plinth to bring a column up to the height of the others. It is almost certain that the stones used in these patterned floors were filched from the pagan buildings in the same way.

In the Renaissance this tradition was revived, but the floors were designed with more thought to the floor as a whole—with a border and a field, and with ornaments at important places in the field. In the Church of the Miracoli at Venice (Fig. 7) a strip down the center of the floor, the path that the processions followed, was treated like a rug, a custom that has been followed in many of our modern churches—at the Chapel of the Intercession in New York City for example.

In the gallery of the Braccio Nuovo at the Vatican there were set into the floor of large marble slabs complete classic Roman pavements of the type made of small pieces of marble (Fig. 8), just as Roman bas-reliefs were set into the walls. The floor incorporates some of the exhibits.

These are only a few examples of the many kinds of floors that have been built. Even a casual search through the usual documents will show many more and of great variety. One or two other examples

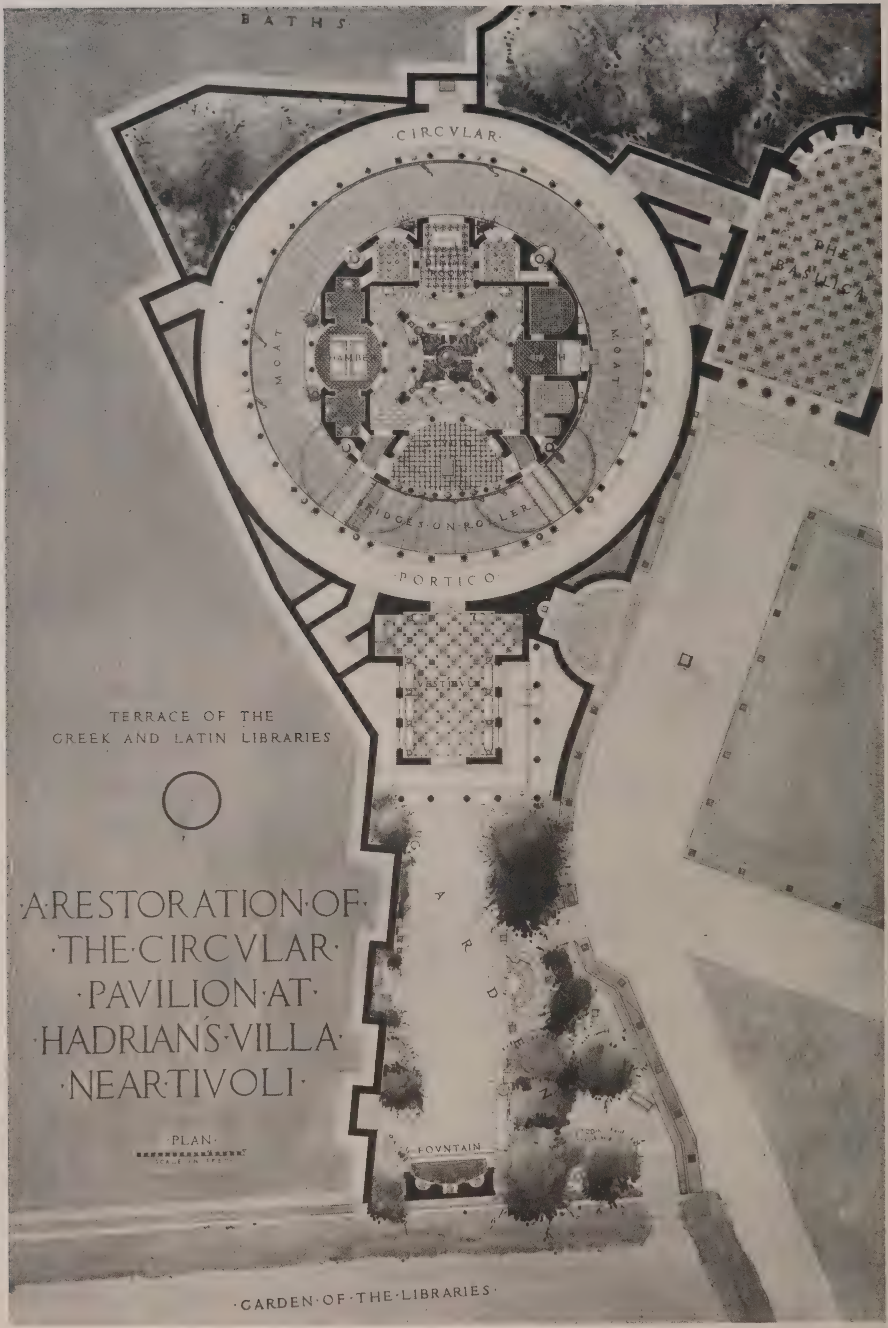


Figure 4. A Restoration of Circular Pavilion at Hadrian's Villa, near Tivoli, by P. T. Shutz, Fellow in Architecture, American Academy in Rome, 1915-18.

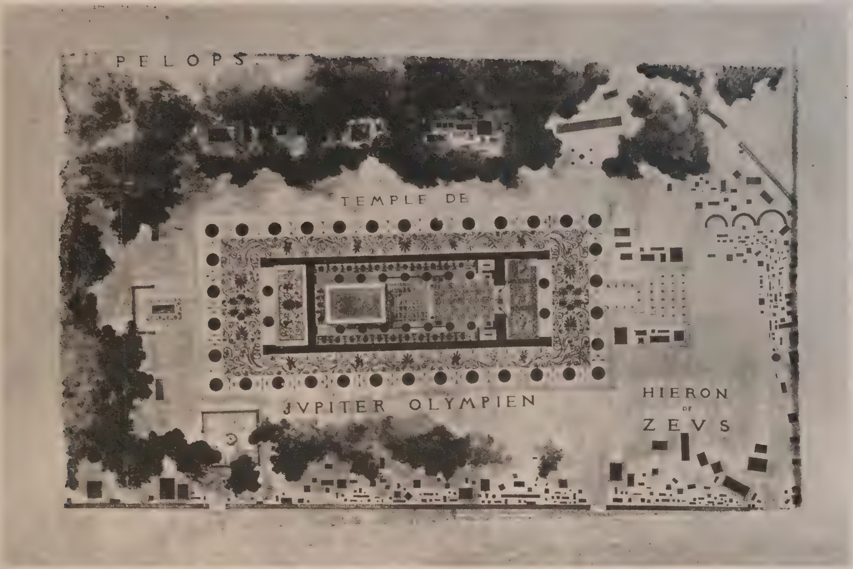


Figure 3. Plan of Jupiter Olympus at Olympia, as Restored by Laloux, 1883, French Academy at Rome. From "Monuments Antiques."

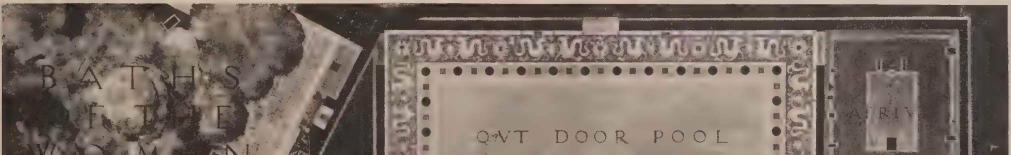


Figure 5. Plan of Women's Baths, Hadrian's Villa, as Restored by R. N. Kennedy, Fellow in Architecture, American Academy in Rome, 1916-19.

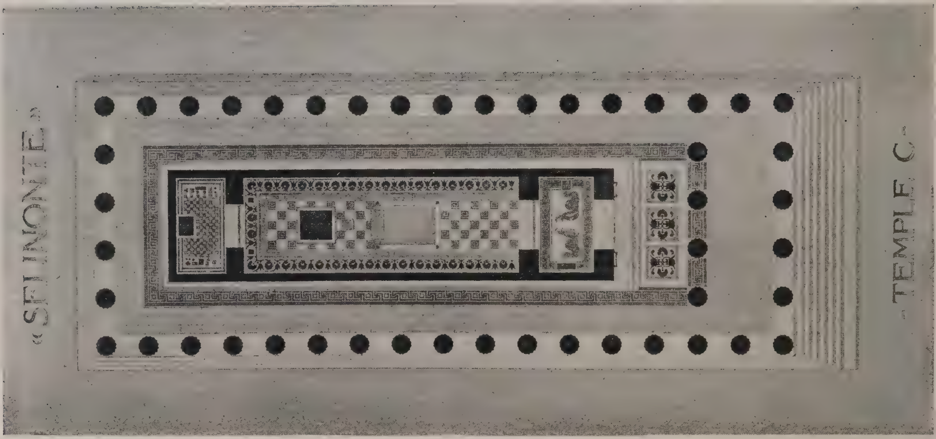


Figure 2. Plan of Temple at Selinonte as Restored by Hulot, 1904, French Academy at Rome. From "Monuments Antiques."

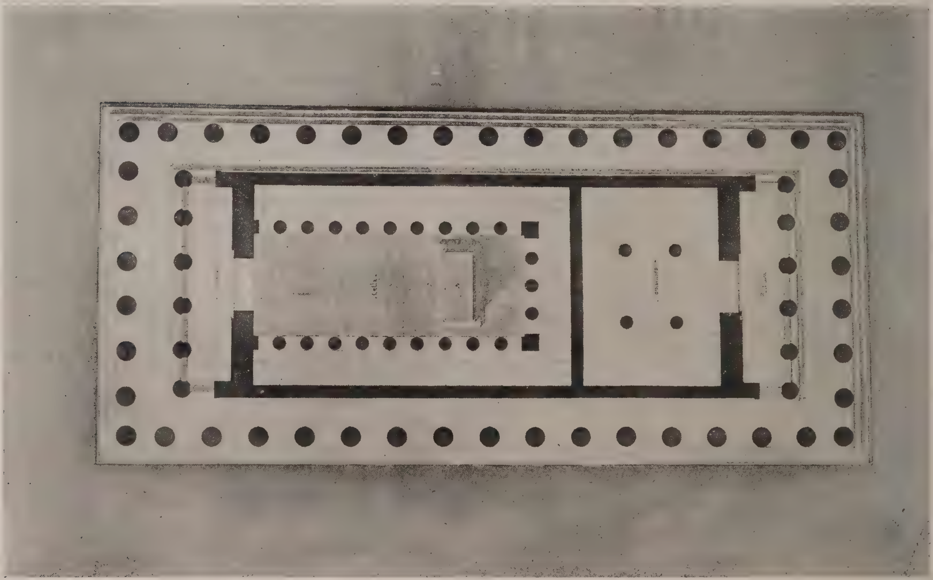


Figure 1. Plan of the Parthenon as Restored by Paccard, 1845, French Academy at Rome. From "Monuments Antiques."

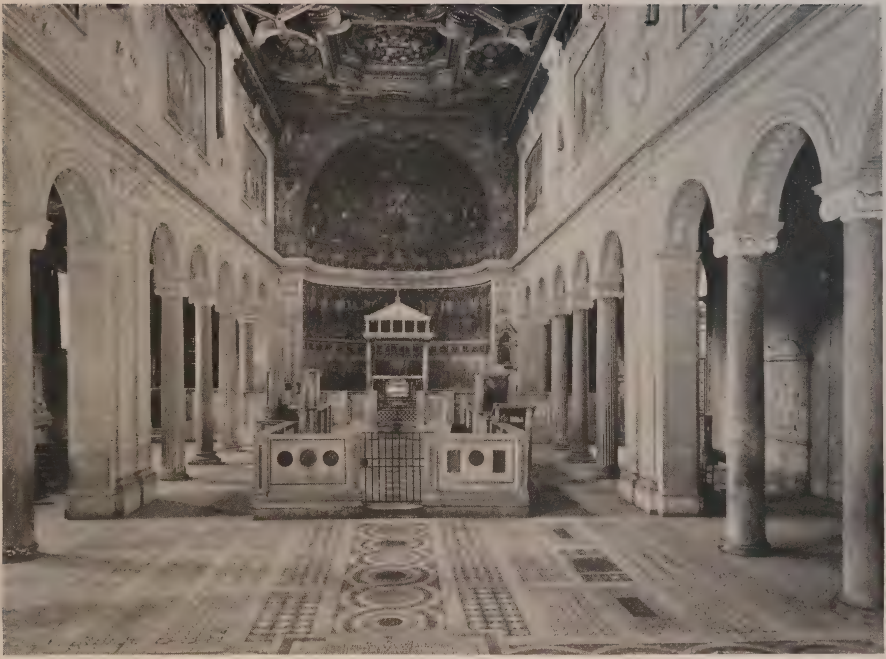


Figure 6. Church of S. Clemente, Rome 9th Century.

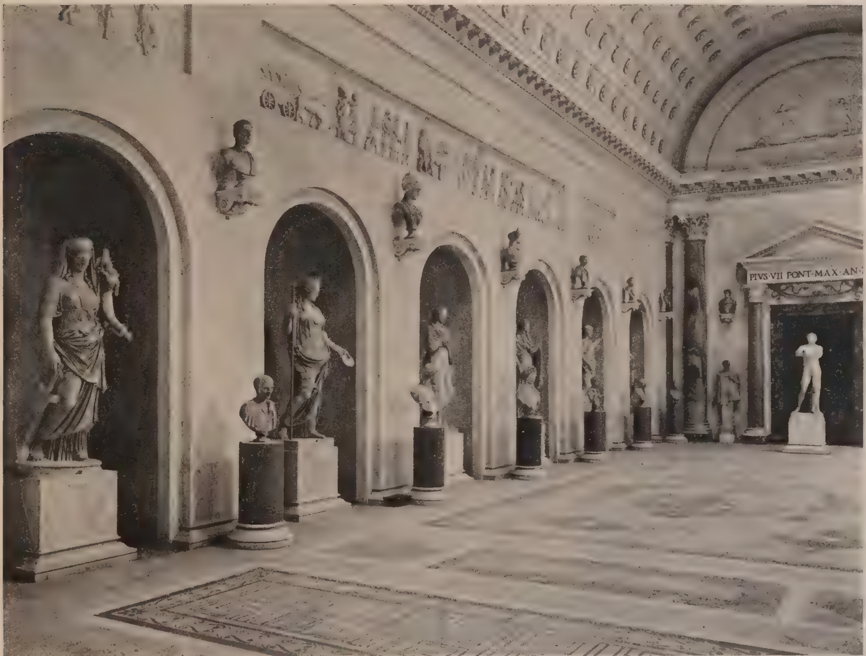


Figure 8. Braccio Nuovo Gallery, Vatican Museum, Rome.

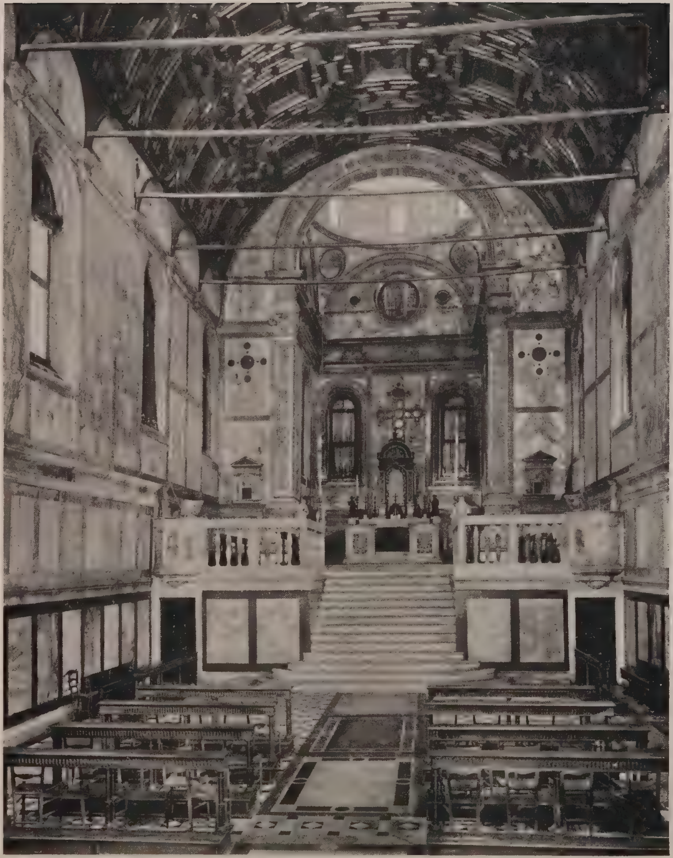


Figure 7. S. Maria dei Miracoli, Venice. Early Renaissance.

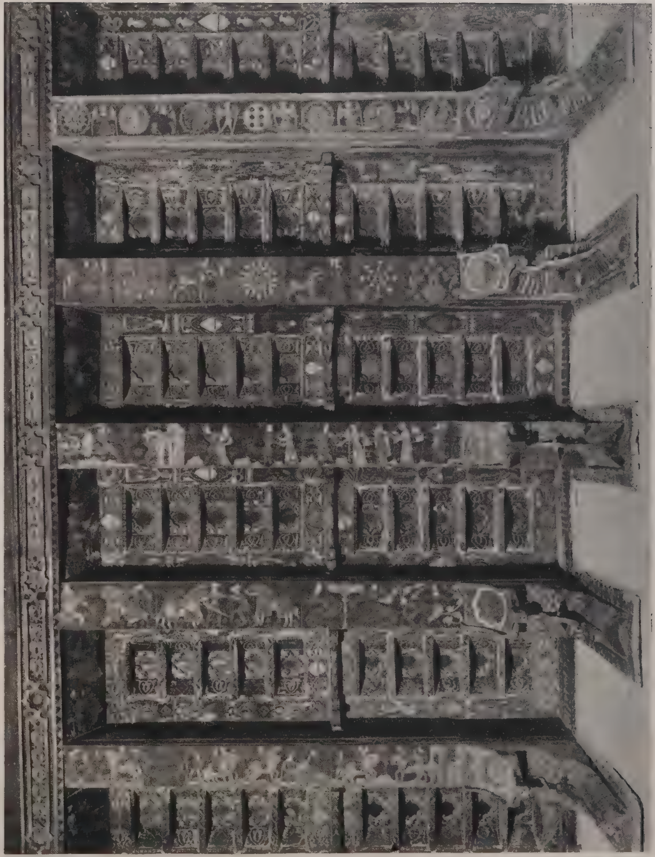


Figure 9. Ceiling, Chiaramonte Palace at Palermo, 14th Century.

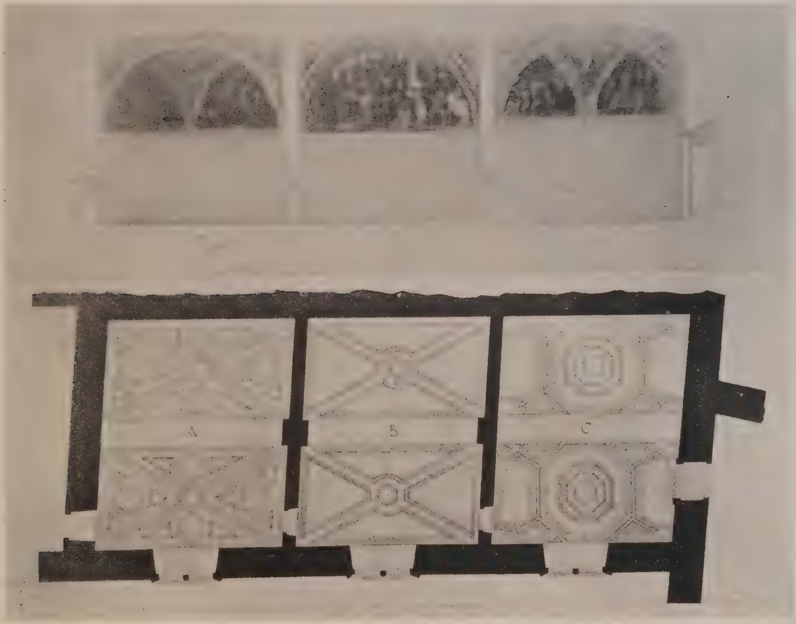


Figure 10. The Borgia Apartments at the Vatican, Rome. From "D'Espouy."

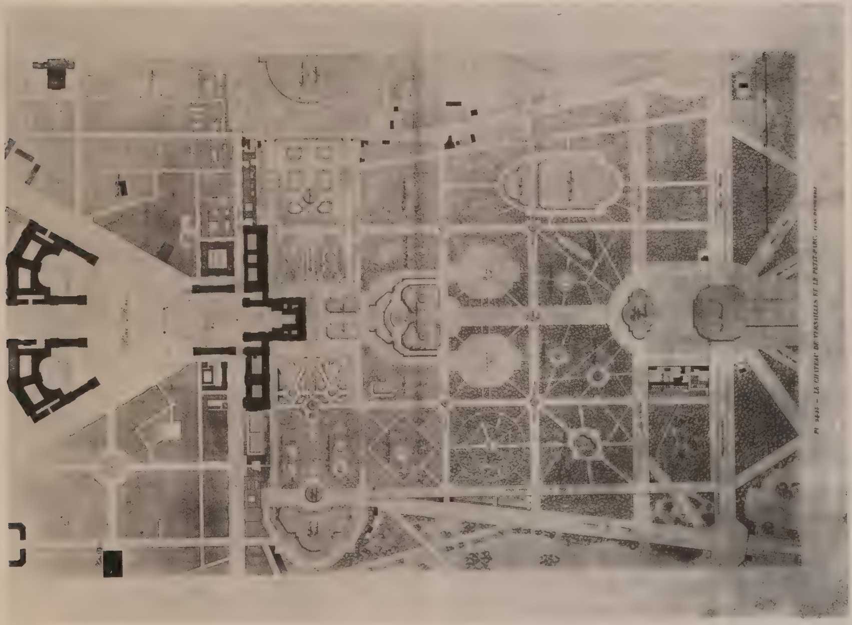


Figure 12. The Park and Château at Versailles from Gromort, "Choix des Grandes Plans Executées."

may be mentioned that would repay the effort of hunting for them; the pavement of Siena Cathedral, with its inlaid allegorical subjects; that of St. Peter's at Rome, with the coats-of-arms of the Papal families; and the paving about Napoleon's tomb in the Invalides at Paris, etc., etc.

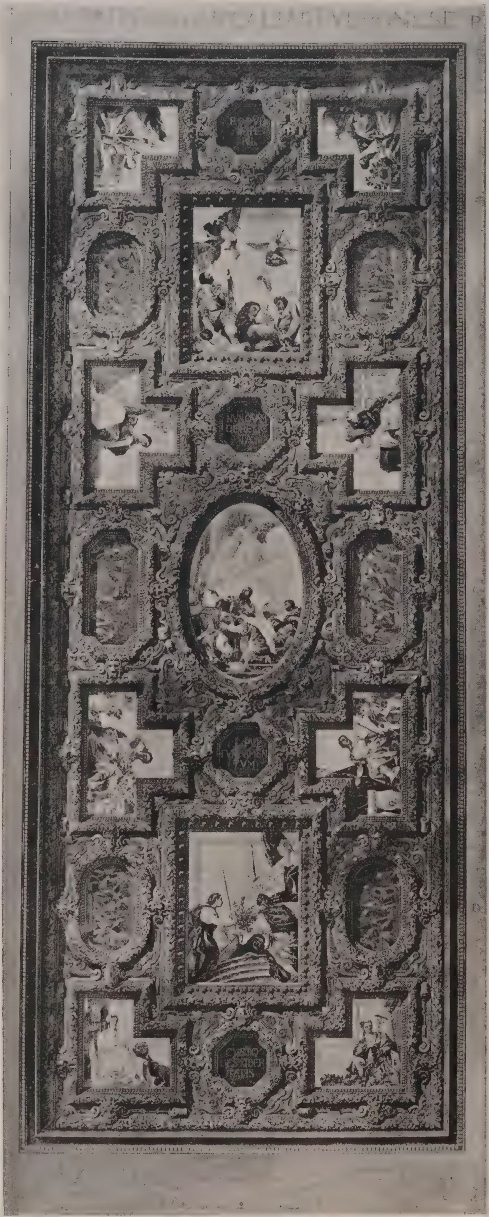


Figure 11. *Ceiling in the Ducal Palace, Venice. From "D'Espouy."*

Then, too, there are ceiling patterns to study. The early roofs were of wood, and the early ceilings were simply the undersides of the roof construction, or of the floor construction—simple in its lines. These elemental surfaces were sometimes decorated with all manner of painting and striping as at the Château Blois. In the Chiaramonte Palace a Palermo (Fig. 9), is a richer one of the same kind, every square inch covered with painted embellishment. A ceiling of this type is very frequently used on a plan to indicate a dining room, or a club lounge.

The Romans had used vaults of various kinds; the the Renaissance builders used vaults of the same kinds. These were decorated sometimes by coffers only, as at the Pantheon, sometimes with elaborately designed patterns—partly modelled and partly only painted, as in the Loggia of the Villa Madama, by which the great hall of the Cunard Building in New York was inspired, and the loges of Raphael at the Vatican. An interesting example of this kind of ceiling is shown in Fig. 10, the Borgia Apartments at the Vatican, where the vaults are warped over irregular surfaces, decorated with raised mouldings, and have paintings in the panels so formed. The paintings in this case were by Raphael.

Sometimes flat ceilings were decorated in the same way, as the one shown in Fig. 11 from the Ducal Palace at Venice, for which Veronese made the inset paintings. This is rich and elaborate, but still formal. Later, during the French Renaissance, the ceilings of the great Salles de Fête, flattened vaults of plaster were ornate with decoration—sometimes patterned and geometrical, sometimes containing human figures or mythical gods, but all well modelled and well composed. The most elaborate of these, which are at the same time some of the best, are in the Palace of Versailles. It took a royal purse to pay for the profusion of exquisite workmanship that went to make up some of these ceilings. Today it is only in public buildings that designs of this kind can be attempted, and unfortunately there are few workmen who can in these times approach the standards of those days.

The journeys through the documents should not stop at ceilings and floors, however. Furniture, layouts of machinery in a mill, the top views of ships, locomotives, automobiles, all have their uses. One of the new sources of study is the aeroplane photograph which can give many suggestions in the study of large plans and their entourage.

The plan of the park of the Palace at Versailles, Fig. 12, a "measured drawing" showing that which exists—will give many hints as to the furnishing of the entourage, the use of the little points and accents that help so much to give life to a plan. Some of these may be trees, some lamp-posts, some statuary; they all can be used in "composing" that conventional drawing, the plan. (See Fig. 171, aeroplane photograph of a part of this garden, PENCIL POINTS for October, 1922).

De Neufforge, Blondel, Percier and Fontaine,

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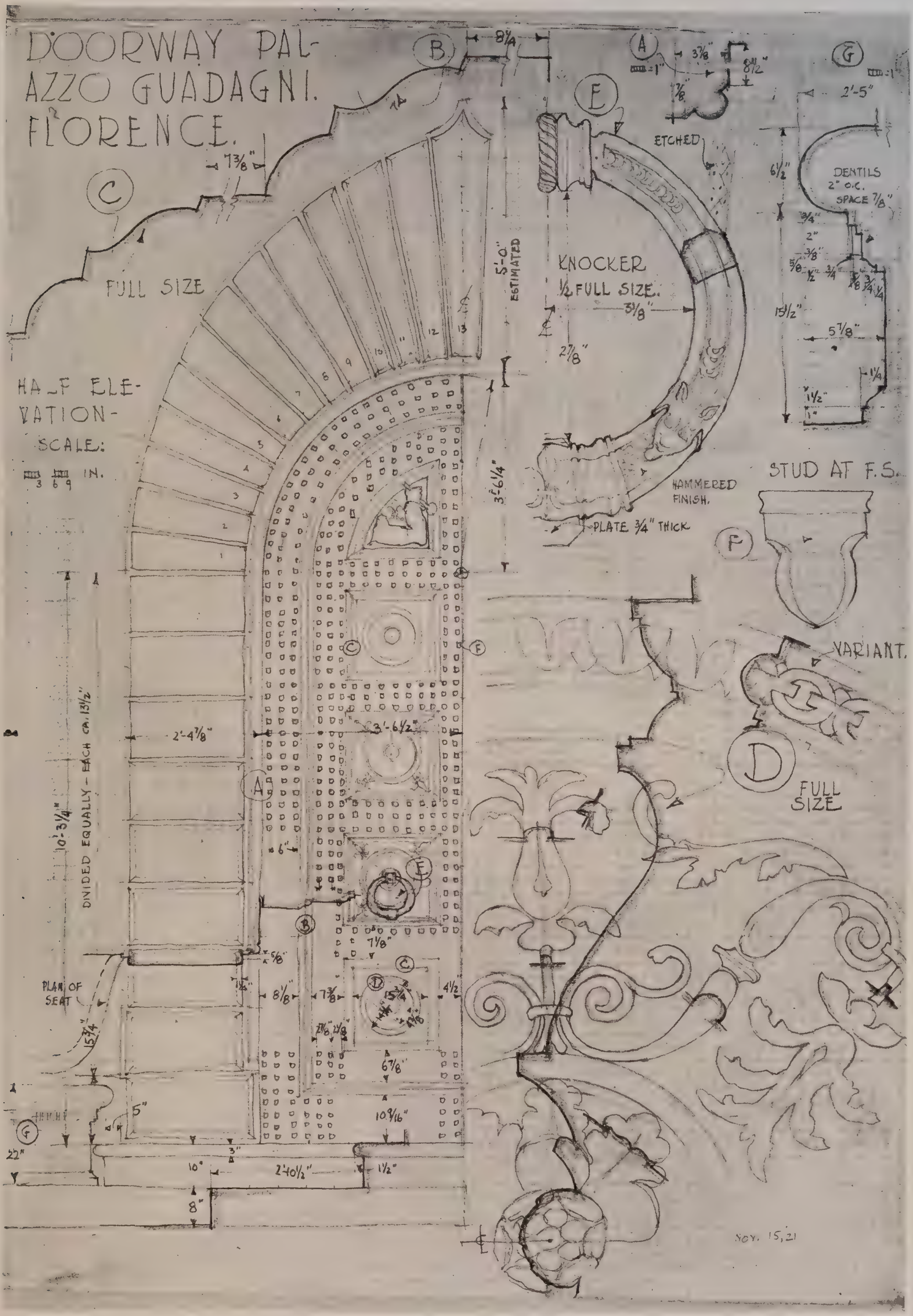

Doorway, Palazzo Guadagni, Florence. Measured by J. K. Smith and Ernest A. Grunsfeld, Jr. Drawn by Ernest A. Grunsfeld, Jr.

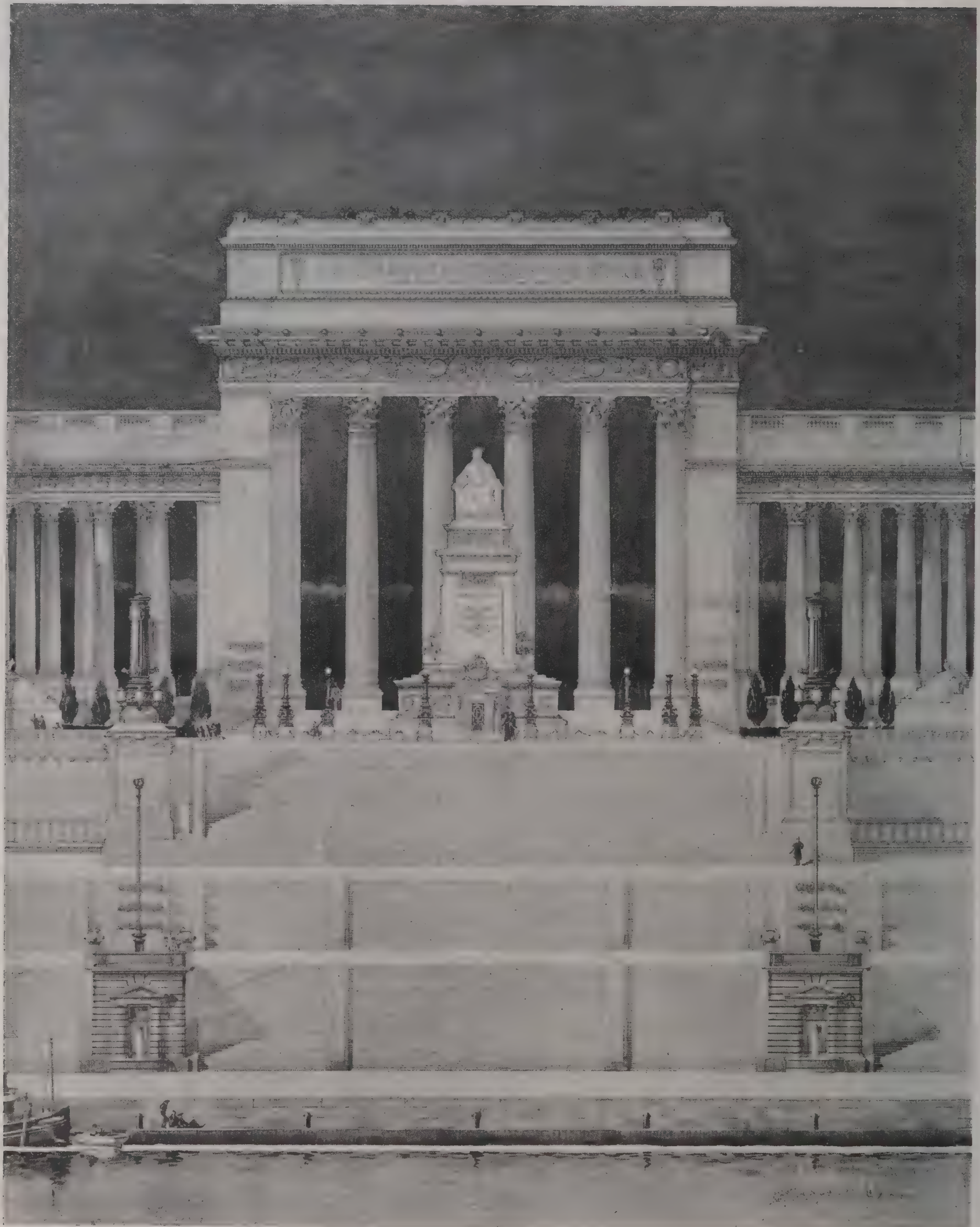

Figure 48. Detail of Competition Design for the Hudson—Fulton Memorial submitted by Albert Kelsey and Paul P. Cret. Rendered by Paul P. Cret.

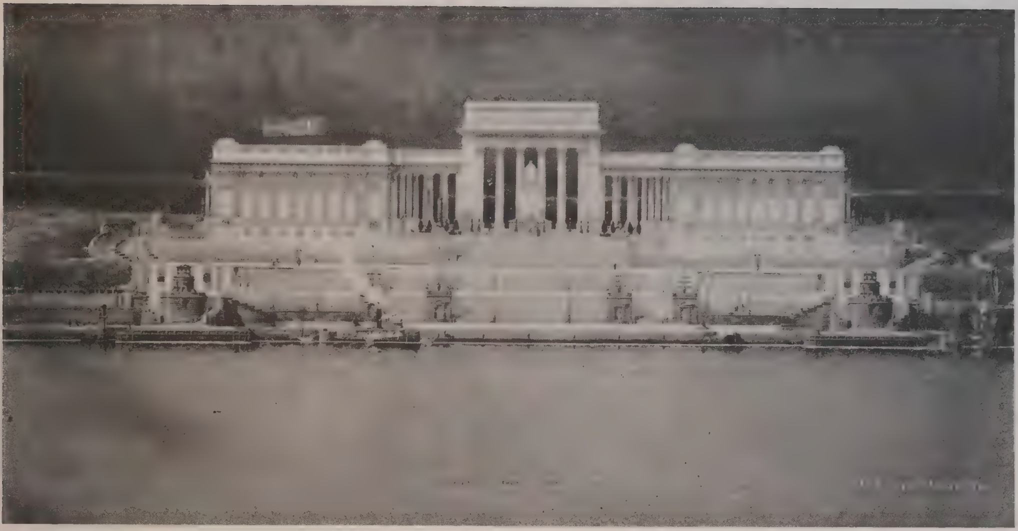

Figure 46. Competition Design submitted by Albert Kelsey and Paul P. Cret, Hudson—Fulton Memorial Competition.

THE TECHNIQUE OF RENDERING, PART VII

BY FRANCIS S. SWALES

In the serial article of which this is the seventh installment Mr. Swales explains practical methods of rendering. These methods, though based on what may be regarded as standard practice include variants that have been found effective in actual work. In preparing this article Mr. Swales has drawn freely upon the fund of experience he has gained in his architectural work.—Ed.

THE plan (Figure 45 of the design for a Museum of Art and Archæology, submitted by Mr. Paul Cret for the Chenavard Prize at Paris, is an example of a technique that is far removed from that usual in American work. All the exactness and "neatness" characteristic of our renderings of plans gives way to a treatment approximately a free water-color sketch. It is very knowing of method; but the method is well concealed under glowing translucent color—in which Mr. Cret excels—and the line work is all but lost in the soft modelling of the planes and contours. The plan in this case seems to have been made to "match" the elevation. It is simply a big water-color sketch composition depending on the rendering for its definition.

In his drawings for the Hudson-Fulton Memorial (Figures 46, 47 and 48) a very striking academic method has been firmly adhered to throughout the presentation of the design proper, the only freedom allowed being at the water's edge and in the foliage at the ends of the drawing, beyond the achitectural parts. The line work of the architecture appearing against the dark background is vigorously—almost harshly—drawn; while the work upon the foreground terraces, steps, etc., is kept soft with a lighter shade of ink and a wider line. In the few lower steps in the lowest flight the lines have been widened to give the effect of narrow washes representing the risers. Texture of the building surfaces, and the "greys" of the design, are given by the most careful and painstaking drawing of jointing, ornament and other detail. The free standing parts of the composition, general mass, the columns and statue showing against the dark sky and the pedestals, etc., in the middle foreground and the pavilions in the advanced foreground, are all silhouetted with a line heavier than that used elsewhere. The silhouette line is darkest—almost black—around the most distant features and becomes lighter, giving less contrast, as the planes of the parts advance. A few light washes are used to key up the planes of the terraces and buildings and light transparent shadows are cast upon the buildings and colonnades. Reflected shades are indicated on the left hand, curved portion of the colonnade. The principal rendering is confined to the accessories—the bulkhead wall, waterfront stairs, ships, trees, which surround the design but do not become essential parts of it. The drawing which is about four feet high by six feet long is rendered in ivory black warmed with raw sienna. The uneven settling of the mixture as well as its warmth and richness of tone gives a strong vibrant quality to the total effect. The texture to the retaining walls is given by going over the whole surface with a pen and drawing in each piece of the random stonework (Figure 47). The drawing of the trees, the ships and indications of steam and other signs of activity and the free rendering of the ripples in the water give just the touches necessary to relieve the rigidity of purely conventional expression and apprize us of the artist, as well as the skilled technician, at work.

The quality of texture may be given to a drawing rendered with flat washes by drawing over it with a charcoal, carbon or lithographer's pencil, and large or detail drawings can be effectively presented that way (Figure 45). It is a very easy way when a good free-hand technique has been developed by the draftsman. Such technique consists of a line almost uniform in width and of a characteristic length; and a regular spacing, or width of the "white line" between. Such drawing for purposes of modelling is the same in technical character as the more customary wash drawing—the same conventions and "tricks" are employed to bring out the relief of the foreground and nearer planes and to set back the more distant parts or planes. Only the principal masses need be rendered in wash and those only for the purpose of giving body. All of the graded effects of light and shade are taken care of in the texture; but a different method of applying the technical principles of modelling a drawing comes into play. Instead of a number of thin graded washes and the employment of settling pigments, rough surfaced papers to give a luminous effect to the whole of a shadow, it is given by direct drawing of masses of lines, which in the total effect become planes. Gradation is effected by either grading the lines from dark at one end of a mass to light at the other —a difference of pressure on the pencil; or by spacing the lines further apart; or by cross-hatching at one end more than elsewhere and dropping out part of the hatching as one goes along; or, of course, by combining the different methods. As one adopts the methods using a point to obtain lines, by which in mass, a plane is expressed, one passes from the technique of the painter to that of the draftsman and the engraver; and many of the conventions used in the line-work of the drawing prepared for wash rendering undergo considerable modification in handling. Rendering to express texture is mainly used

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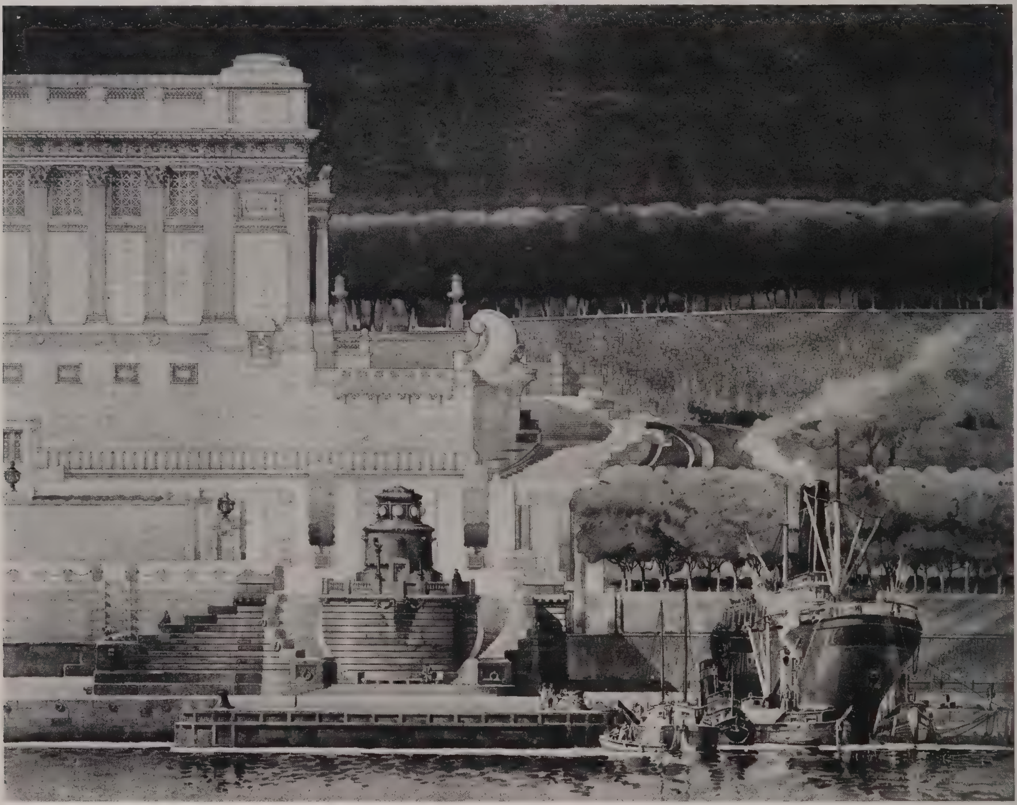

Figure 47. Detail of Design submitted by Paul P. Cret and Albert Kelsey for Hudson—Fulton Memorial. Competition.

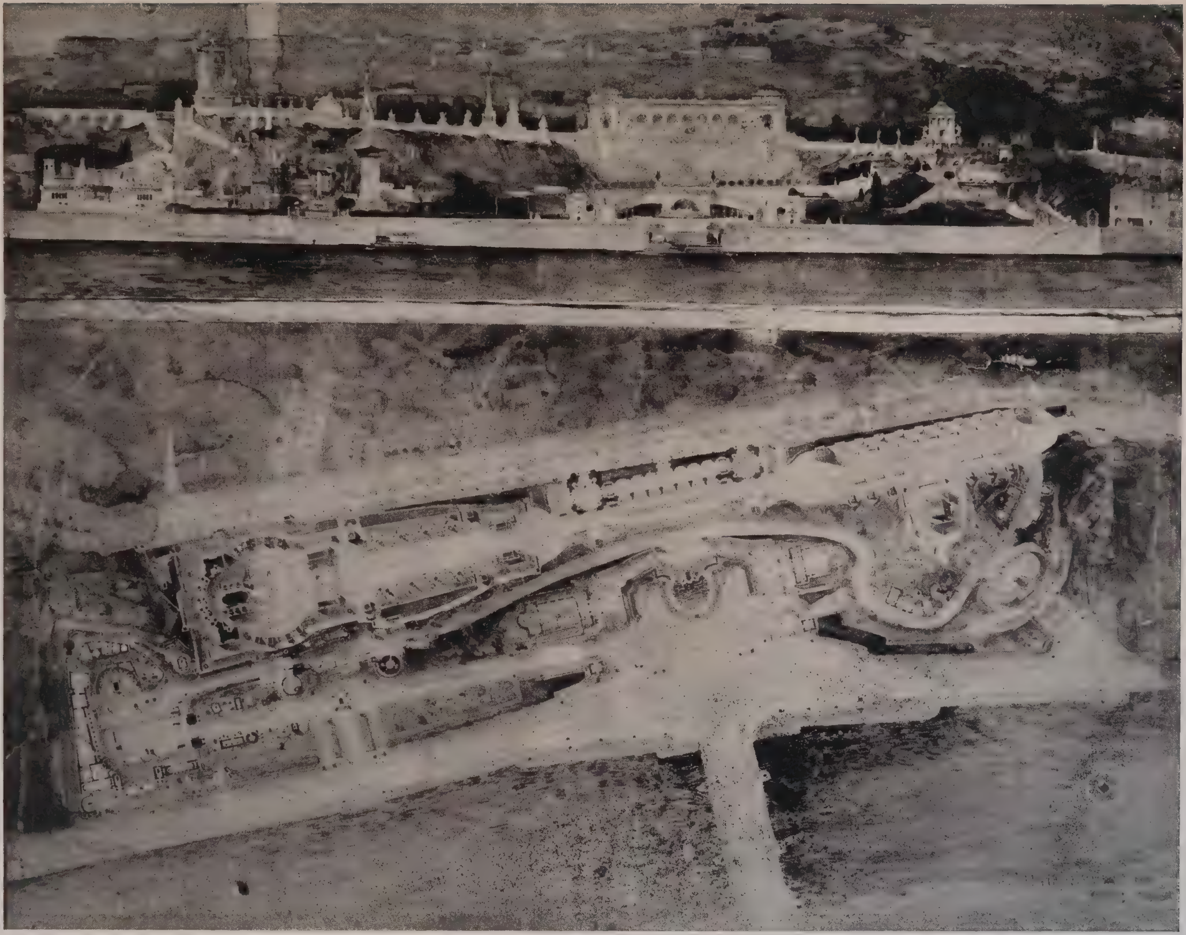

Figure 45. Design by Paul P. Cret for "A Museum of Art and Archaeology," Chenavard Competition, Ecole des Beaux Arts.

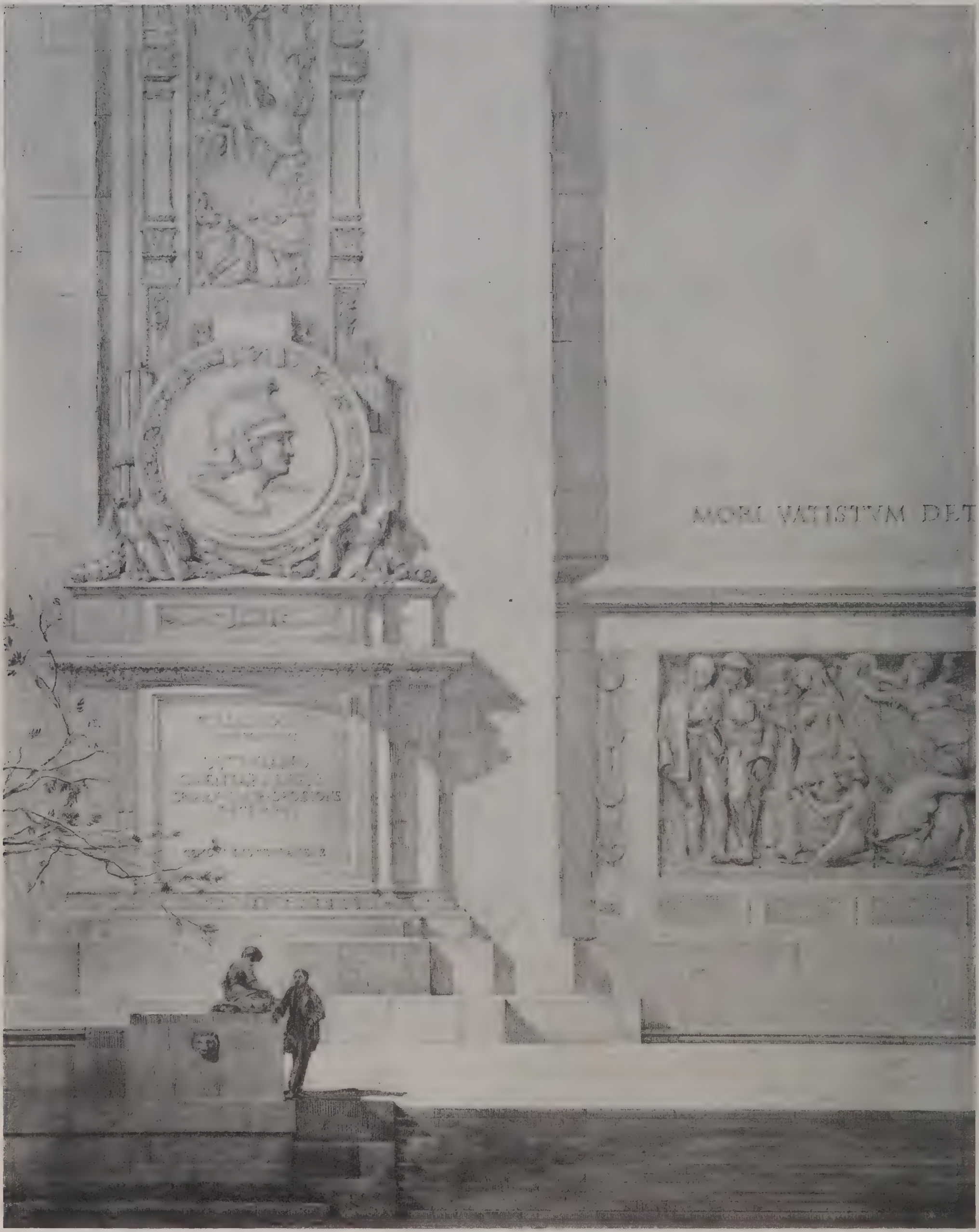

Figure 49. Detail of Design by Paul P. Cret and Zantzinger, Borie and Medary, Competition for Kansas City War Memorial.

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CARNEGIE ARCHITECTURAL SOCIETY PITTSBURGH, PA.

THE Carnegie Architectural Society, student organization at the Carnegie Institute of Technology, again takes the privilege, kindly extended by Pencil Points, of reviewing their activities for the past several months and announcing the results of the election of officers, held recently.

Mr. C. A. Lundquist and Mr. J. S. Douglass were reelected to the offices of President and Treasurer respectively. Mr. A. K. Goehring was elected Vice-President and Mr. D. C. Doig, Secretary. Two new names were also elected to membership; Mr. P. Hoffer Sload and J. Donald Mawhinney.

Of special interest, not only to the members but to the department as a whole, was the week of Jan. 13, which carried out, according to the policy of the organization both their educational and social endeavors. On the evening of Jan. 15th, Mr. Steen, prominent Pittsburgh architect, addressed members and guests at the house which is located on the Campus. His talk, which was related from his own experiences in the practice of Architecture, was especially interesting and contained excellent advice from a student's viewpoint.

On Jan. 18th, a Smoker was held at the house with members of the Department as guests. Despite the conflict with another Campus activity on that night a large turnout was present to enjoy the varied program of Music, Stunts and Surprises which had been arranged for the occasion in addition to the customary smokes and eats. During the same week an inspection tour of the Carnegie Steel Mills at Braddock, Pa., was conducted by the organization. This trip proved very interesting, not to mention the educational value. Another attractive meeting was held on Feb. 28th. Mr. Albert Naser, graduate of the University of Michigan, was a guest and gave a brief talk.

Extensive plans have been made for future activities of architectural interest as well as in social respects. During the latter part of March, two very able speakers will deliver addresses at the house. The annual banquet will be held during the coming month, while the departmental Smoker, sponsored by the organization will be held on March 29th.

At every other meeting sketches are presented by members, a prize being offered for the best submitted. Two recent subjects which were exceptionally popular were of the C. A. S. house and sketches of some examples in the French Renaissance. The prize-winning sketch of the house competition is to appear on the C. A. S. page of the "Thistle", annual publication at Carnegie Tech.

One of the members, Mr. J. E. Tillotson, has been receiving congratulations for his splendid showing in the Beaux Arts competitions having received First Mention Placed in the last two "B" Plan Projets. Mr. J. N. Franklin, alumnus, who is taking a Graduate course, has also been honored by election to Tau Sigma Delta, the highest architectural honorary at Carnegie Tech.

A request is again made through Pencil Points that all alumni, with whom C. A. S. has been unable to communicate, send in their present addresses. Inquiries in regard to courses from prospective students of architecture are welcomed by the Society. Literature will be mailed upon request.

CHARLES MOORE AWARDED S. A. D. G. MEDAL

THE Medal of Honor of the Société des Architects Diplômés par le Gouvernement, which is given from time to time to laymen for distinguished service in the advancement of Art and Architecture, has been awarded this year to Mr. Charles Moore, who, as is well known to all architects, has been for many years chairman of the National Fine Arts Commission in Washington, the only body in our National government which occupies itself with Art. The presentation of this medal took place at a dinner given by the S. A. D. G. at the Metropolitan Club in New York on Saturday evening, March first, at which addresses were made by His Excellency, the French Ambassador, M. Jusserand, Mr. Royal Cortissoz, Mr. Moore, Dr. John H. Finley, of the New York "Times" and Mr. Chester H. Aldrich, of Delano & Aldrich, president of the American Group of this society. Among those present were: Messrs. Cass Gilbert, Thomas Hastings, John Russell Pope, William M. Kendall, Louis C. Ayers, Harvey W. Corbett, H. V. B. Magonigle, Charles A. Platt, Siddons Mowbray, James A. Fraser, Frederic A. Delano, Edwin H. Denby, Herbert Adams, Thomas Adams, Donn Barber, John M. Howells, Benjamin W. Morris, and John Van Pelt.

The medal given by the Society to the School of Architecture having the best record of accomplishment for the year was awarded to Yale University School of Fine Arts at a meeting held on March third at the University. Addresses were made by Mr. Aldrich, who presented the medal, and by President James R. Angell of Yale University.

THUMB TACK CLUB OF MIAMI

THE character of the Thumb Tack Club of Miami, Florida is exceptional in that its membership is composed almost entirely of student draftsmen. This club, which was organized two years ago in connection with the work of the Department of Architecture of Miami High School, meets on alternate Friday evenings. The programs are varied and interesting. Topical discussions of architectural subjects are held at different times, and trips to buildings under construction have also been undertaken.

In connection with the Thumb Tack Club is a Saturday Sketch Club, the members of which go on sketching parties at frequent intervals. With the abundance of Spanish Architecture in the vicinity of Miami, it is not difficult to find suitable subjects to sketch. In fact, one cannot go two blocks anywhere in the city without wanting to grab a pencil and sketch.

At present a series of lectures are being given by prominent architects under the auspices of the Miami Architectural Club. The Club was particularly fortunate in obtaining the consent of Mr. H. J. Besgetoorian, of the Miami Architectural Club, to deliver the first of these lectures. Mr. Besgetoorian chose for his subject, "Beaux

Arts Training and Its Influence on Modern Architecture." In well chosen words Mr. Besgetoorian summed up the development of American architecture and the influence which Beaux Arts training had had upon American architects.

Arrangements have been made for lectures by other prominent architects in the near future.

EXTENSION ATELIER OF COLUMBIA UNIVERSITY

SATURDAY evening, March 8th, the Extension Atelier of Columbia University held its annual dinner at the Roma Restaurant. Many of the old members were back, and nearly fifty pencil pushers sat down to the melee. While a terpiscordian was tickling the keys, the courses were interspersed with songs suited to the occasion. The real atelier spirit prevailed, and soon even the most sedate were playing with dolls toys and dog houses, the favors that were given out. After the demi-tasse and cigars were served, the Massier, Mr. Merrell G. Maybeck, introduced Prof. William A. Boring, Director of the School of Architecture. He compared our present advantages with those under which he worked in Paris., Mr. J. V. Van Pelt was then introduced and made a few general remarks relevant to the practice of the profession. He was followed by Mr. Harvey W. Corbett, who told a stock of stories of relations with clients, and gave some practical advice out of his own experience. Mr. A. E. Flanagan was next called upon and responded with some of his quiet humor. Then followed Mr. Symonds, with a "selection from Shakespeare," and a turn or two at the piano. All of the members were called upon for a story of which Mr. Tyler's literary gems easily took first rank. After a short business session, the assembly dispersed and went en charrette.

ATELIER CUNNINGHAM, WASHINGTON, D. C.

"THERE you are" as Roxie says over the radio, having obtained a publication of our historic beginning in "Pencil Points" we are on our road (full of rocks) to fame. Not having received any more first mentions placed since our last writing it would seem that our road is nothing but rocks, not to mention "X's."

We have at least taken one step forward, in addition to a few backward one's, and that is the enlargement of our quarters. In order to meet the demand of the charetteers we have taken the adjoining room (heat and light furnished and the roof hasn't leaked yet.) Now in addition to taking this room we have opened a Department of Interior Decoration under which a few of the members will do the interior problems of the B. A. I. D. The others will do their interior decorating at the armchair lunch across the street.

Major Cunningham will continue to donate his services to the Atelier in both branches in which he is an expert.

SELAH.

"MOSAICS" IN ACTUAL BUILDING

(Continued from Page 72)

in their plans showing garden forms will give many other hints as to the handling of entourage. The pattern in the paving of the forecourt of St. Peter's at Rome (Fig. 155, Pencil Points for May, 1922) shows how much actual value there is in a few lines of mosaic even in such a large space.

Supplement this kind of research by a study of the best of modern buildings. A trip to New York for this purpose—or to a lesser extent to Boston, Chicago, Philadelphia, Washington, Detroit or San Francisco—could be a liberal education in itself. Failing this opportunity, a voyage can be made through the current architectural magazines, where material, good, bad and indifferent, is to be found in profusion.

LEWIS COLT ALBRO

LEWIS COLT ALBRO, architect, died at his home in New York, March 1. Mr. Albro was born in Paris, France, February 6, 1876. His parents were Mary Colt and Lewis K. Albro, of Pittsfield, Massachusetts.

His boyhood and early youth were spent in Pittsfield until in 1893 he came to New York to enter the offices of McKim, Mead and White. It was there, working under the guidance of Mr. McKim that he developed the talent that made him afterwards one of the best known authorities on domestic architecture of his time.

During his stay of thirteen years with McKim, Mead and White, he was entrusted with many important works, being put in full charge of the building of several of the Carnegie Libraries, the palatial Mitchell residence at Wading River, and the city residence of Charles Dana Gibson. He worked with Mr. McKim on the Columbia University Library and became temporarily associated with the firm when he built the Stickler Memorial, Orange Free Library, at Orange, New Jersey.

In 1906 he severed his relations with McKim, Mead and White and formed a partnership with Harrie T. Lindeberg. This new firm achieved a high reputation very quickly, and when by mutual consent they parted in 1913 to practice independently, Mr. Albro's name was well known in the architectural world.

For ten years his work was marked by a versatility and a keen appreciation of color, mass and design that won for him the distinction of being placed among the most notable architects who have made domestic architecture their specialty.

Among some of his later important works that attracted wide attention may be mentioned the residence and estate of George Arents, Jr., at Rye, New York, the Italian villa of John L. Bushnell at Springfield, Ohio, the group of English farm buildings at Cold-Springs-on-the-Hudson, (now the estate of Dr. Ernest Fahnestock) and the formal but charming Jerome Mendleson residence at Albany, N. Y. He is survived by his wife, who was Miss Mary Pace of Richmond, Virginia.

THE TECHNIQUE OF RENDERING, PART VII

(Continued from page 76)

for detail drawings; and in foregrounds and foliage of elevations drawn to a large scale. Occasionally it is done on large elevations drawn to a scale as small as one-sixteenth of an inch to the foot—but that requires the use of a very fine pencil-point or fine pen and once undertaken means that the combined methods of academic wash-rendering and of the pen and ink draftsman, or of the etcher, must be carried throughout the entire set of drawings in order to preserve the consistency of effect.

A combination of wash rendering in clear, transparent tones, with a texture given with pen and ink, is one of the most effective methods developed by American delineators. The drawings of the Kansas City Peace Memorial constitute a particularly interesting example of such technique. (These will be reproduced in the next installment of this article.)

PERSONALS

Herbert B. Beadler, Architect, has removed his offices to 813 Ulmer Building, Cleveland, Ohio.

Robert B. Cridland, Landscape Architect, has removed his offices to 306 South Smedley Street, Philadelphia, Pa.

William R. Frampton and H. L. Bowers have been taken into the firm of Richard M. Bates, Jr. The firm will be known as Bates, Frampton & Bowers, Architects, 412-414 Eleventh Street, Huntington, W. Va.

William E. Spink, Architect, has opened an office at 511 Canal-Commercial Building, New Orleans, La.

Felix A. Burton, Richard Arnold Fisher, Charles Lewis Pitkin, Dana Somes, Frederick W. Wead announce the removal of their offices to The Thorndike Building, 234-240 Boylston Street, Boston, Mass.

HERE *and* THERE *and* THIS *and* THAT

Conducted by RWR

POETRY is scarce this month. Must be the recent cold snap has put a crimp in the poetry business, but Comrade Bert MacDonald saves the day by shooting "The Pest" under our door just as we are going to press. If he hadn't come across in the nick of time we would have had to write a poem ourselves, so all the readers of this column have had a narrow and lucky escape.

THE PEST

Did you ever meet that "Please loan me" pest?
He says, "Please loan me this or please loan me that,"
And picks on the boss as well as the rest,
Till lately we've talked of passing the hat,
So the pest in some tools could invest.

Say! You oughta see that "Please loan me" pest—
He bums my eraser and Henry's T-square
And gets all his thumb tacks by silent request,
Or borrows my scale when I'm not aware.
Gosh! I detest that "Please loan me" pest!

Surely you've met a please loan me pest,
A guy that won't buy a thing of his own.
Even his vest is a father's bequest,
And he won't even pay for his calls on the 'phone.
He sure is a pest; who wouldn't protest?

I guess every office has some kinda pest,
There's the poor sullen crab with a face full of gloom,
But he can't come abreast of that "Please loan me" pest,
Whose fingers have clutched everything in the room,
So I guess we won't rest till the pest has gone west.

EVIDENTLY Mr. Ernest Olaf of Kansas City thinks this column is too serious and needs snapping up a little. Perhaps he is right. Mr. Olaf has the floor.

IT WAS ENOUGH
A Drafting Room Conversation
By Ernest Olaf

DRAFTING room conversations are of a varied nature. They range from the most earnest discussions of structural intricacies through all the phases of engineering and design and sincere expressions upon the mystical meanings of Architecture to the most irrelevant of badinage, amounting to most extraordinary battles of wit.

An example of such repartee occurred in an office the day after the completion of the drawings for a rush job. This particular morning the architect (hereinafter often called "the Boss") had arrived quietly without disturbing the office force, who were already at their respective tasks. He was pouring studiously over his work at the moment when the usual sounds from the drafting room were broken into by a slow, soft drawl, which attracted his attention.

"Darned if I don't feel like the mule this morning," were the words that he heard.

"What mule?" came the question in another voice.

"Ain't you heard about that mule yet? Well, and I think, too, that the Boss feels like the colored man in the story about Missouri's roads." As the speaker finished, the drawl seemed to fade as if it were pressed out; as if one was leaning heavily with his abdomen against a drafting board.

"Tell it," two voices urged in unison.

Then, starting as if the drawler were relieving the abdominal pressure, the voice was heard to say, "A passerby, working his way with difficulty along a road, espied a hat out in the middle of the mud bobbing up and down. That being a strange occurrence, he stopped and investigated. He found a negro, who was having a hard time keeping his nose above the mud and water.

"'Hey, Nigger! You're in a bad fix out there, ain't you?' he cried.

"'Wahl, boss, I'se ain't braggin' none, but I'se ain't in no whar nigh as bad a fix as dis heah mule I'se ridin'."

Laughter followed, and the architect did not fail to catch the point for he too smiled. Then he asked himself if he really had ridden the drafting people too hard, but his mental question remained unanswered for a young voice broke into the waning laughter.

"If it wasn't for us, the Boss would have a hard time, wouldn't he?"

"Yes, and we too! We'd be left high and dry, without any jobs." The tone of the reply was sharp, but gradually softened as the speaker continued, "You remind me of what happened at our house the other evening. The wife had asked me to hang a picture. So the step ladder was brought and preparations made, when of a sudden, my wife, who was in the adjoining room, heard a terrific racket. Startled, she yelled at our son, 'Bob, run and see if papa fell,' and in he came, took one look, and shouted back, 'Not yet. He's hanging to the picture mold."

Smiles probably made the circle, but no audible evidence of amusement followed.

The architect made as if to get up but thought better of it. He had no more than settled back in his chair when he heard, "I got one on the Boss, the other day while you were all out to lunch. One of these fresh salesmen waltzed in, right up to the Boss, and beamed at him and said, 'You're going to have a snap very soon, are you not?' I could just feel the Boss bristle. 'You won't

Sketch made in Lima, Peru, by Mr. Paul Studer, New York.

have to use a comb and brush long, will you? All you'll need is a dust rag.' "

"Men! Men!" the lady's voice rang protestingly. "You men! You're just like eggs; you're either fresh or rotten, or you're just hard boiled."

This precipitated an avalanche of conversational disturbance until one of the young men, getting too strong in his efforts at reprisal, met up with, "What? What are you thinking of?" from the lady.

And his reply of "Nothing," was answered in a quick flash of female elation, "Oh do take your mind off yourself."

"Peace! Peace!"

"You know that the emblem of peace is the olive branch. We'll choose for the emblem of war, the orange blossom."

"Tra la, tra la la la, I'd hate to get well of the wrong disease."

"Cut it out, or as the poet says it, you'll get yours in the neck."

Then the first voice was heard to drawl, "Vain things. It matters not much about what you chew the rag. Vanity, all is vanity." A tone of dignity crept into the drawl, "Man is but a worm of the dust, he wriggles about a while and finally," as the drawler progressed he must have pressed his abdomen against the drafting board for he grunted the final words, "finally, some chicken gets him."

It was enough. The architect got up, found his coat and hat and quietly made his exit.

MR. MATHEW H. TARDY, Anchor Bldg., Roanoke, West Va., wishes to secure a copy of PENCIL POINTS for June, 1922. Mr. Sylvian Schnaittacher, 233 Post St., San Francisco, Calif., needs a copy of May, 1921. Mr. Louis Cohen, 15 Lane St., Patterson, N. J., wants a copy of February, 1923, and Mr. Everett S. Cofrane, care of Adden & Parker, architects, Boston, Mass., wants a complete set of PENCIL POINTS up to January of this year.

MR. A. CORRUBIA of Corrubia & Henderson, architects, Arcade Bldg., St. Louis, Mo., has extra copies of PENCIL POINTS. Two copies of June 1920 and one each of October 1920 and December 1920. He would like to exchange any two of these numbers for one copy of May 1922.

WELL, we evidently fixed up Prof. King, who needed a copy of PENCIL POINTS to complete his file. Here is the evidence.

Gentlemen:

In the last issue of PENCIL POINTS I notice that Prof. H. M. King of North Dakota Agricultural College would like to secure a copy of PENCIL POINTS for February, 1922. Under separate cover, I a mailing him a copy of that month's issue. I hope, however, it will not be like a little incident in the life of Mrs. Davidson's father who was a professor for thirty years. One time he lost his umbrella so he placed a notice on the blackboard in his classroom that he would like to have it returned. The next day there were forty umbrellas left in his room, ranging in size from a baby's parasol to a large yellow and white wagon umbrella. I hope Prof. King will not receive forty issues of PENCIL POINTS for February, 1922.

It is also interesting to me and a coincidence that this professor's initials and last name were almost identical with those of my father-in-law, H. M. Kingery.

Yours truly,
MARION DAVIDSON.

HERE is a letter from Mr. F. Graham Williams which explains itself. Here also are the rules for the Second Annual Golf Tournament for Architects and Draftsmen to be held at Atlanta, Ga.

We are enclosing herewith a folder which will explain the Golf Tournament for Architects of the Southeast which will be held May 9, 1924, at the East Lake Country Club, Atlanta, Georgia, and we will be glad for you to give this publicity for the Architects of the Southeast, as it will be impossible for us to reach each individual Architect.

In other words, we will be glad for you to extend an invitation to all the Architects and Architectural Draftsmen to be with us on that day, whether they get a direct notice from us or not.

The Southeastern Architects' Golf Championship Cup

All practicing Architects, or members of any of the A.I.A. Chapters are eligible to compete for this cup. (No entrance fee.)

Eighteen holes, medal play; (U. S. G. A. Rules) less your home club handicap (of not more than 30), adjusted to a par 72 course, will determine the winner.

The big, permanent cup is to be held for one year by the winner (with his name engraved thereon).

The miniature of the big cup is to be the permanent property of the winner.

The Atlanta Architects' Championship Cup

All practicing Atlanta Architects, or members of the A.I.A. Chapters are eligible to compete for this cup. (No entrance fee.)

Eighteen holes, medal play; (U. S. G. A. Rules) less your handicap will determine the winner.

The big, permanent cup is to be held for one year by the winner (with his name engraved thereon).

The miniature of the big cup is to be the permanent property of the winner.

The Southeastern Architectural Draftsmen Cup

All architectural draftsmen are eligible to compete for this cup. (No entrance fee.)

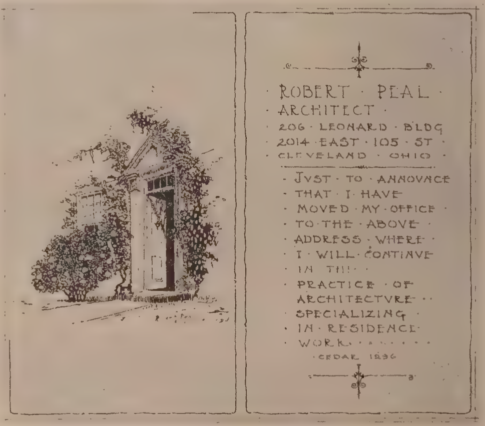
Eighteen holes, medal play; (U. S. G. A. Rules) less your handicap will determine the winner.

The Architects of the City of Atlanta, and the draftsmen of the South, who do not have a club handicap MUST send in to the Handicap Committee THREE SIGNED SCORE CARDS showing their average game, and they will be given their handicap.

In case of a tie it shall be played off immediately (1, 3, 6 or 9 holes).

The Putting Contest is for all who DO NOT PLAY GOLF, and will be held on the practice putting green at 5:30 P. M.

SPECIAL NOTE: The Barbecue is for ALL ARCHITECTS AND DRAFTSMEN, whether they play Golf or not, and will be at 6 P. M.



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Attractive Announcement Card sent out by Mr. Robert Peal, Cleveland, O.

"HANDICAP COMMITTEE"

Mr. W. J. Chase, 140 Peachtree St., Atlanta, Ga.; Mr. F. D. Burge, 101 Marietta St., Atlanta, Ga.; Mr. W. C. Powell, Candler Bldg., Atlanta, Ga.; Mr. Jas. D. Beacham, Bruce Bldg., Greenville, S. C.; Mr. A. F. Comer, 23 Abercorn St., Savannah, Ga.; Mr. Willis Irvin, Lamar Bldg., Augusta, Ga.

UNFAIR COMPETITION

Ethyl: Have you noticed how the men of all ages flock around Sally lately?

Methyl: Yes, and I've found out why. She swiped a bottle of rare old Bourbon from her dad and is using it as her perfume!

AND our recently established drafting room registry seems to have functioned successfully in at least one case as explained in the subjoined letter. We have already been able in many cases to perform similar services and all we ask is that every architectural draftsman, specification writer and superintendent in the United States will register with us for the benefit of all concerned. You never can tell when someone may desire to locate you and we offer this service to the profession without expense of any kind. We have made gratifying progress in building up our list but it is still far from complete. If you have not received a registry card it is due to no intentional discrimination on our part and we shall be glad to furnish forms on request.

"Permit me to make a rather tardy acknowledgement of a recent favor obtained through the columns of your Publication PENCIL POINTS.

I refer to an item appearing in the November 1923 issue, Page 57, wherein you gave space to my request to help locate a former acquaintance and draftsman on the Pacific Coast.

The item had escaped my notice at first glance, but was very forcibly called to my attention on December 19th by receipt of a letter from the gentleman in question, and whose address I shall give here for your possible future reference, Cyril F. Broad, 608 De la Vista Ave., Santa Barbara, California, at present connected with office of Soule, Murphy and Hastings, Architects, of the same city.

Your recently inaugurated system of registration for draftsmen was the source of my inspiration in re-newing my search for this particular man, and I wish to express my very grateful appreciation to you for providing the means of bringing about a re-union between Mr. Broad and myself, after a seeming hopeless separation of several years following the world war which engulfed most of us.

Again thanking you, I beg to remain,

Very truly yours,
J. WILLIAM KERN,
2 Rolf Apts.,
Wheeling, W. Va.

FROM a letter received by C. Grant LaFarge, Secretary of the American Academy in Rome, from Frank P. Fairbanks, Acting Director, we quote the following:

"On the 1st of February, Director Stevens left Rome for his long deferred visit to Egypt.

"Since the completion of the collaborative problem, the first concern has been to photograph the models and drawings for our future records, and to ship the work to New York. The individual programs of each team have also been forwarded to the New York office. The senior Architects' team undertook the treatment of a Stadium entrance. Hafner, senior architect; Stevens, second year sculptor, and Bradford, first year painter, worked out this scheme. The senior sculptor, Amateis, with the second year painter, Floegel, and the first year architect, Deam, undertook a garden motif to serve as a setting for a piece of scultpure. Senior painter Schwarz prescribed the treatment of a Casino at a Health Resort. Marcean, second year architect, and Meyer, first year sculptor, collaborated on this project.

"After the collaborative problem, a number of men felt the need of change, and started south, taking with them as travelling companions visiting architects and classical students. Hafner, architect, and Rogers, classical fellow; Deam, architect; Meyer, sculptor, with Olsen and Simpson, visiting architects; Watts, composer, Rebert, classical fellow and Cary, visiting classicist, composed the groups that travelled.

"The remaining men in residence are all occupied in completing their required works, and are progressing satisfactorily.

"Professor Lamond offers the following translation of a notice of Leo Sowerby's Quintet:

Comoedia. Monday, February 18th, 1924. Paris.

At the last Seance of the S. M. I. (Société Musicale Independante) an American composer presented an extremely interesting work. The Quintet for wind instruments by Mr. Leo Sowerby is of solid structure, very modern in conception. It is proof of its author's very sure command of technique and also of his essentially musical qualities. It produced a strong impression.

"Early in the month the fellows invited Mr. Blashfield to lunch with them and on the 16th of the month he sailed from Naples for New York after a much briefer stay in Rome than we had hoped for.

"We have received three contributions to our library fund. One of 100 Dollars from Col. and Mrs. George B. McClellan, one of 50 Dollars from Mr. James Speyer, and 500 Lire from Mr. H. H. Wrenn, a visiting architect.

"Some excellent photographs have arrived from the New York Office of some recent works of the former fellow in painting, Eugene F. Savage. They prove a splendid incentive to the fellows here, and are very much appreciated in general.

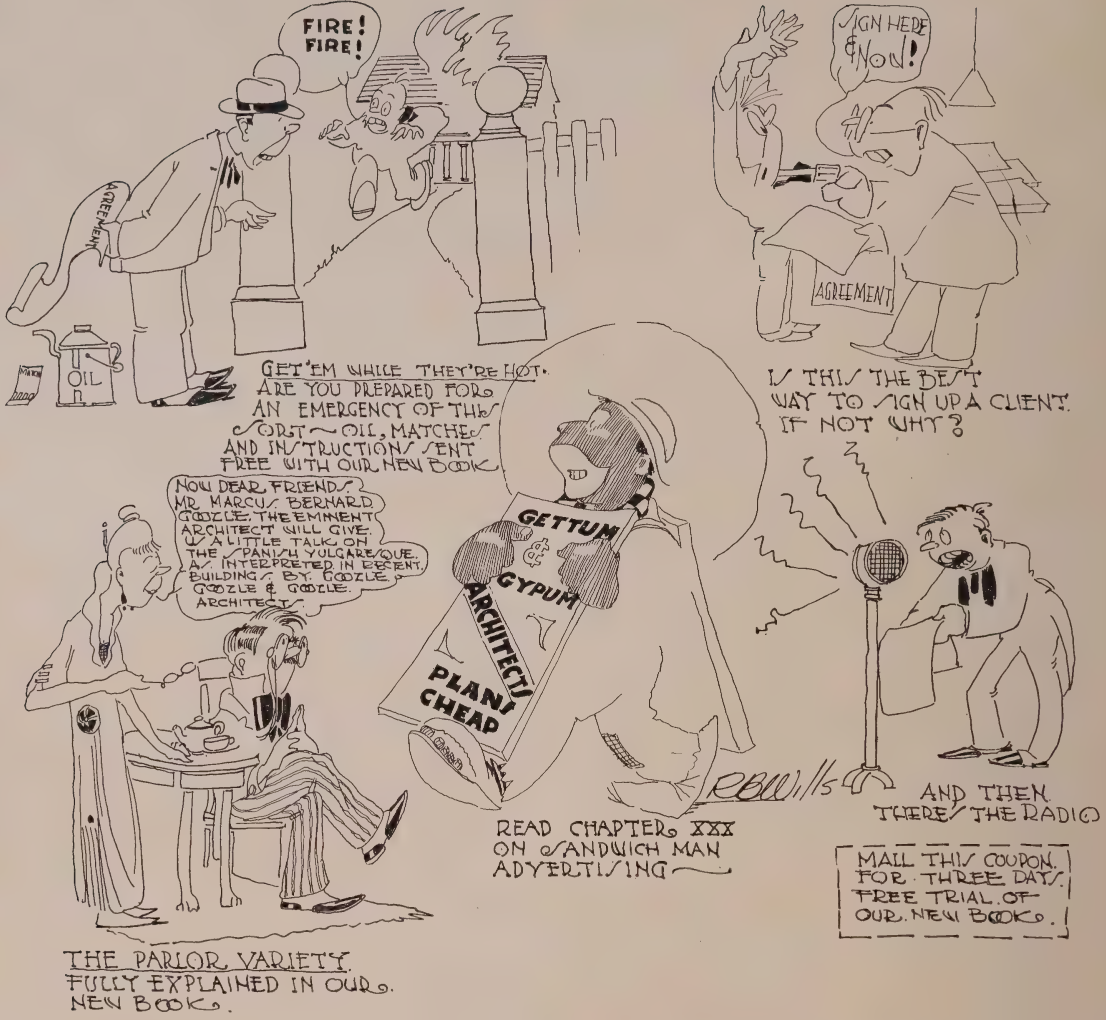
"The water supply for the entire city of Rome has been seriously interrupted this month by the breaking of one of the main supply pipes to the city, six kilometers beyond Tivoli. For seven days the main building was without its central heating, and all water for every purpose had to be carried into the building by hand.

"The Villas Aurelia, Bellacci and Chiaraviglio did not begin to receive Acqua Marcia from the main pipe for 10 days. The interruption of the Acqua Marcia supply for a day or two is not uncommon for us and with our reserve tanks we are not greatly inconvenienced at such times. But we have a large quantity of Acqua Paolo that constantly runs away that belongs to us, which we are unable to use for our gardens that bake and dry up in the summer, because we lack funds for putting into use a well with pumping system at the Villa Aurelia.

"We are glad to report real progress in the matter of procuring the use of the small house now occupied as a trattoria on the new land at the rear and side of the Academy. Our Counsel, Mr. Del Frate, informs us that the Court has denied to the present occupants a renewal of the lease and has ordered the tenants to leave the premises by August 31st, 1924. That a ruling has been made in favor of the Academy is considered auspicious for our obtaining control, at no very distant time, of what still contributes a source of annoyance to the users of our library.

Very sincerely yours,
FRANK P. FAIRBANKS,
Acting Director.

WE REQUIRE for our New York Office the services of a man with first-class selling ability and acquaintance with the more important architects to undertake and intensively push the sale of a high-class solid steel window frame, possessing many advantages and sound talking points. In applying give full details of experience, age, salary desired, etc. A good opening for an energetic, practical man. Box 711, care of Pencil Points.


FIRE! FIRE!
AGREEMENT
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OIL
GET'EM WHILE THEY'RE HOT. ARE YOU PREPARED FOR AN EMERGENCY OF THIS SORT ~ OIL, MATCHES AND INSTRUCTIONS SENT FREE WITH OUR NEW BOOK
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IS THIS THE BEST WAY TO SIGN UP A CLIENT. IF NOT WHY?
NOW DEAR FRIENDS. MR. MARCUS BERNARD GOOZLE, THE EMINENT ARCHITECT WILL GIVE US A LITTLE TALK ON THE SPANISH VULGARESQUE. AS INTERPRETED IN RECENT BUILDINGS BY GOOZLE, GOOZLE & GOOZLE. ARCHITECTS.
GETTUM & GYPUM ARCHITECTS PLANS CHEAP
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THE SPECIFICATION DESK

A Department for Specification Writers

MISCELLANEOUS ITEMS OF CONSTRUCTION PART XVII

By Otto Gaertner

In this series of notes Mr. Otto Gaertner, A.I.A., Associate Member American Society of Civil Engineers, is treating of a number of the minor matters of construction that are troublesome unless the architect happens to have met a similar problem previously—matters of a more or less special nature.—Ed.

Garages (*Continued*)—If the fixed or wall connector is not on a switchboard or charging panel, care should be taken that the wall part cannot accidently come in contact with anything. The switchboards or charging panels, at or upon which spark producing switches, connectors or other devices occur, must be kept high enough so that the spark producing devices are at least four feet above the floor, except when such devices or panels are enclosed in vapor proof enclosures. If the switchboards and panels are placed in a separate room or enclosure where dangerous vapors cannot occur they may be put at any height.

The above also applies to cut-outs, switches, key sockets, receptacles, motors and dynamos, which should also be placed at least four feet above the floor, unless of course they are a part of a vehicle. Motors may be kept down lower if they are of the fully enclosed type. If the motors are high up but are not of the fully enclosed type, they should be covered with wire screens over openings at the commutator ends, such screens being of not less than number fourteen mesh.

Portable lights should have keyless sockets of metal-sheathed porcelain or moulded composition and should be provided with handles and strong wire guards with a hook at the top. These electrical installation suggestions are especially adaptable to garages and in addition the general requirements of the various electrical codes and the rules and regulations of the Insurance Exchanges, Fire Underwriter and City Ordinances must be complied with. These requirements permit ample leeway as to cost but in electrical work it is not economical to choose the cheapest in the end. If possible the equipment should be chosen for its strength, wearing quality, safety to those who use it and fitness for the purpose which it is to fulfill. At present there are numerous enclosed types of switches, panel boards, meter boards, etc., which not only exclude dust and dampness but which also prevent accidental contact with live parts and the nuisance of being out of order due to being tampered with by those who are not supposed to meddle with or have access to them.

Without specific cases to dicuss it is impossible to go into the equipment as there are so many requirements likely to be met and no two buildings have the same problems. A machine shop may be connected with the garage. It may require individual motors for the lathes, presses, drills, etc., or the machinery may be equipped with pulleys and belting and be operated by a single motor. The latter may be more economical if all the machinery is to be used at the same time. Likewise current must be supplied for motors to run air compressors, pumps, elevators, etc., of various capacities.

The different types of garage buildings also present different problems in illumination, depending upon the uses to which they or their subdivision are to be put. Machine rooms are treated differently from the show rooms, offices, storage rooms, etc. In the machine rooms individual illumination may be provided for the machines or only general illumination. Generally of the two a combination is most effective. Offices, salesrooms and general utility spaces present only the ordinary lighting problems. In large garage rooms, repair shops, paint shops, wash rooms, battery rooms, and such spaces, special conditions occur. The fixtures in the battery room should be vapor proof and they should have all metal parts painted with an acid fume proof to prevent corrosion. In the wash rooms the fixtures should be waterproof.

The question as to the number, size, and type of fixtures must be left to the engineer in charge as the colors of the walls and ceilings, the ceiling heights, the elevation at which the most intensive light is needed, and other items must be considered. By means of a foot-candle meter the amount of illumination obtained by various spacings, types of fixtures and their distances above the floors may be obtained and the most effective arrangement selected. Many garage owners insist on painting the wall dark with perhaps black wainscots to about four feet above the floors so as to hide as much grime and grease a possible. It is admitted that oily and greasy hands, exhausts from running motors and numerous other garage conditions play havoc with light colored walls; but the darker the walls, the larger the cost of the proper illumination. The dark walls absorb a large amount of light and have little reflecting qualities. No doubt it would be much better to save on the cost of illumination and increase the cost of maintenance by additional cleaning or an occasional repainting of the walls and ceiling.

A light room has a more cheerful effect on workmen and makes them more efficient and induces them to keep the premises in a cleaner and more sanitary condition as well as being a help to their morale and eyesight. As an example of this one might take the motor of an automobile or a piece of machinery in the machine room. If it were painted a light warm gray instead of black, it would help to reflect light instead of absorbing it, would present a more cheerful appearance to the workman and he would wipe off surplus grease and dirt and put forth at least a little effort to keep it clean. In addition, the paint will lengthen the life of the machine. The cases of the machine and the work rooms are similar.

Of course, the walls and ceilings will get soiled and lose a lot their reflecting qualities. Also different paints have different reflecting qualities. While reflection is wanted, too much in the wrong place will produce a glare causing eye strain and be undesirable. For the illumination we are more concerned in the reflection from the ceiling than in that from the walls, and more in that from the upper than that from the lower walls. It is, therefore, best to have the ceilings lighter than the walls, and as light as possible, pure white being preferable. But not only the color but also the finish of the paint is important. A glossy surface may give too much reflection so that a flat, eggshell, or matt finish is esential and one having sufficient paint or thickness to prevent dark surfaces underneath from showing through and absorbing the light. Where decorative effects are mandatory the loss of light due to dark colors must be made up by increased lighting capacity.

The lasting quality of the finish and the possibility of cleaning it must also be thought of. There is comparatively little choice between any good white paints when they are fresh, but after they have been exposed for some time there is a great difference. It has been found that white lead and oil has a coefficient of reflection of eighty-three per cent when new but only twenty-five per cent when exposed for one year. In the same way lithopone paint showed eighty-six per cent and eighty per cent calcimine eighty-two per cent and seventy-five per cent, magnesia bearing flat enamel eighty-five per cent and eighty-two per cent and gloss enamel eighty-three percent, and eighty-three per cent.

(To Be Continued)

PUBLICATIONS OF INTEREST TO THE SPECIFICATION WRITER.

Any publication mentioned under this heading will be sent free, unless otherwise noted, upon request, to readers of PENCIL POINTS *by the firm issuing the publication. When writing for any of these items please mention* PENCIL POINTS.

Specifications for Metal Lath Construction.—17 specifications covering all classes of work. 7 full page plates of construction details approved by the Associated Metal Lath Mfrs. and American Specification Institute. 16 pp. 8½ x 11. Associated Metal Lath Mfrs., 123 West Madison St., Chicago, Ill.

Mapaz Hand Book No. 1.—Neat little pocket size memorandum and note book, leather bound, containing data on painting and paint materials, and much other material interesting to architects and draftsmen, including a chapter on lace stencils, color formulas, etc. New Jersey Zinc Co., 160 Front Street, New York City.

Built-Up Roofing for Modern School Buildings.—A. I. A. standard classification 12B14. Booklet covering subject illustrated by 50 examples of modern school structures of various types and sizes. Specifications and other useful data. 36 pp. 8 x 11. Philip Carey Co., Lockland, Cincinnati, Ohio.

Published by the same firm. Specifications for Built-up Roofing. Eight specifications covering different problems with detail drawings covering flashings, etc. 24 pp. 8 x 11. Pipe and Boiler Coverings. Catalog No. 1362, showing application of asbestos and magnesia products for insulating purposes. Specifications, much technical data, diagrams and tables. 70 pp. 6 x 9.

Air-kore Fire Doors.—Folder describing new type of door with details of construction and test made by Underwriters Laboratory. J. G. Wilson Corp., 11 East 36th St., New York City.

Putting More Light Into Basements.—Folder describing steel basement window. Tables of sizes, detail drawings. The Bogert & Carlough Co., Patterson, N. J.

Ankyra—Booklet showing application of this type of Anchor in building construction. Sectional drawings showing details of application. 32 pp. Ankyra Mfg. Co., 148 Berkeley St., Philadelphia, Pa.

For Roofs of Lasting Beauty.—Folder in colors showing Mohawk Rustic Colonial and Standard Shingles. Methods of Construction. Mohawk Asbestos Slate Company, Inc., Utica, N. Y.

Specification for Acid Fume Exhaust Fans.—A. I. A. File No. 30-d-1. Specifications for both alternating current and direct current, table of data on exhaust fans. The Duriron Co., Inc., Dayton, Ohio.

Webster From the Air.—Attractive booklet illustrated with a series of aerial photographs. Data on Webster engineering service as applied to modern heating. 32 pp. 9 x 12. Warren Webster & Co., Camden, N. J.

Published by the same firm, Bulletin 726 describing the Webster Boiler-Return Trap. Typical layout showing uses of this device, diagrams and technical data.

Whale-Bone-Ite Seat.—Catalog E describing and showing construction of this modern accessory for the well appointed building. 16 pp. 9 x 12. The Brunswick-Balke-Collender Co., 623 So. Wabash Ave., Chicago, Ill.

Handbook and Price List.—Covers wrought iron pipe and tubing for various uses, photographs, tables and much useful data. 48 pp. 5 x 7. Reading Iron Co., Reading, P.

Fireplace Suggestions.—Illustrated catalog showing designs of many fireplaces and a variety of equipment for the modern fireplace. 16 pp. 8½ x 11. Colonial Fireplace Co., 4603 Roosevelt Road, Chicago, Ill.

Anti-Slip Treads.—Bulletins describing Carborundum, Bronzalum and Feralun treads. Text on stair and side walk hazards. American Abrasive Metals Co., 50 Church St., New York City.

Ideal Arcola Hot Water Heating Boiler.—Booklet describing this type of equipment for hotels, small houses, flats, stores, schools, etc. Complete layouts, sectional drawings and all necessary data. 24 pp. 6 x 9. American Radiator Co., Dept. T95, 1803 Elmwood Ave., Buffalo, N. Y.

Specifications and Working Details.—Covers stucco, stucco base, plaster base and insulating base. Instructions for mixing and applying, details, drawings and specifications. 8 full page plates. 20 pp. 8 x 11. The Bishopric Mfg. Co., 110 Este Ave., Cincinnati, Ohio.

Win-Dor Casement Window Operators.—Catalog No. 9 describing modern casement hardware, sectional drawings and standard half size details. 14 pp. 8½ x 11. The Casement Hardware Co., 235 Pelouze Bldg., Chicago, Ill.

Celotex Specifications.—Loose-leaf folder with large sample of material. Complete specifications for all uses, details of construction covering exterior finishing for frame buildings, sheathing for brick veneer buildings, roof insulation and a variety of other uses. 8½ x 11. The Celotex Co., 645 No. Michigan Ave., Chicago, Ill.

The Cutler Mail Chute.—Illustrated booklet describing this type of equipment for mailing letters from the upper stories of buildings. 12 pp. 7 x 10. The Cutler Mail Chute Co., Rochester, N. Y.

The Donley Book of Fireplaces.—Illustrated brochure showing drawings and photographs of many attractive fireplaces. Large sheet showing drawings of construction. 16 pp. 9 x 12. The Donley Brothers Co., 13933 Miles Ave., Cleveland, Ohio.

The Dunham Handbook No. 114.—Covers subject of radiation and all other matters pertaining to the modern heating plant. Sectional drawings and typical layouts. Much engineering data, handy pocket size. 144 pp. C. A. Dunham Co., Fisher Bldg., Chicago, Ill.

Martins Finishes.—Booklet on refinishing old varnished floors, painted floors and oiled floors. Also new work. Martin Varnish Co., 2520 Quarry St., Chicago, Ill.

The Regulation of Temperature and Humidity.—Handbook covering the subject with descriptions of necessary apparatus. 64 pp. 8½ x 11. Milwaukee, Wis.

Store Front Construction.—Full size details showing Kawneer construction. 16 x 20. Kawneer Mfg. Co., Niles, Mich.

Architectural Varnishes, Stains, Fillers and Enamels.—Specification for all classes of work. Recommendations for standard and unusual finishes. 20 pp. 8½ x 11. Standard Varnish Works, 445 Fourth Ave., New York City.

Mortar Colors.—Data sheet with 12 panels in color showing mortar joints in combination with brick of various colors and textures. Also much useful information on the coloring of stucco. 8½ x 11. Clinton Metallic Paint Co., Clinton, N. Y.

The Operation of Boilers.—Booklet showing construction and operation of various types of Kewanee Boilers. Diagrams, tables, etc. 24 pp. 6 x 9. Kewanee Boiler Co., Kewanee, Ill.

Poles Worthy of the Stars and Stripes.—Catalog covering the subject of flag poles for various uses. Diagrams showing best method of applying to buildings, etc. 4 x 9. 32 pp. The Pole & Tube Works, Inc., Ave. D and Murray St., Newark, N. J.

Mahogany in Colonial Days.—Attractive folder showing many old Colonial types. Also the "Home Beautiful" "Chippendale and Mahogany," and "Sheraton and Mahogany." The Mahogany Association, Inc., 1133 Broadway, New York.

Present Day Schools.—Illustrated brochure covering the application of terra cotta to modern school buildings. 32 pp. 8½ x 11. National Terra Cotta Society, 19 West 44th St., New York City.

Better Banks.—Illustrated brochure treating of modern bank buildings, large and small. 32 pp. 8½ x 11. National Terra Cotta Society, 19 West 44th St., New York City.

Color in Architecture.—Brochure illustrated in color and with numerous engravings in sepia, on the basic principles of the application of color in available mediums. 8½ x 11. 38 pp. National Terra Cotta Society, 19 West 44th St., New York City.

Marble Portfolio.—Loose-leaf portfolio showing 40 different varieties of marble in their natural colors. Color plates 6 x 8. A copy of this portfolio handsomely bound in leather will be sent only to architects applying for it on their own letterhead. Tompkins—Kiel Marble Co., 505 Fifth Ave., New York City.

Swimming Pool Sanitation.—Special bulletin covering this subject with diagrams and illustrations of typical pools. 8 pp. 8½ x 11. The R. U. V. Co., 383 Madison Ave., New York City.

Non-Cracking Terrazzo Flooring.—Data sheet showing improved method of laying floors of this type introducing new factor in floor design. Diagrams and full information. 8½ x 11. L. Del Turco & Bros., Harrison, N. J.

Hotel, Club and Institution Installations.—Attractive illustrated booklet devoted to the complete furnishing of hotels, clubs and similar buildings. Many full page engravings. 6 x 9 in. 32 pp. Albert Pick & Co., 208 W. Randolph St., Chicago, Ill.

Published by the same firm, "School Cafeterias," covering subjects of cafeteria planning and equipment and "Kitchens" a practical book dealing with the layout and complete equipment of various types of kitchens.

Sheet Metal Building Specialties.—Catalog showing complete line of range boilers, pantry sinks, drain boards, gasoline storage tanks, etc. 32 pp. 5½ x 8½ in. John Trageser Steam Copper Works, 447 W. 26th St., New York.

Improved Mechanisms in Builders' Hardware.—Complete catalog showing detail drawings, and instructions for installing mechanical builders' hardware such as casement hinges, casement operators, hinges and pivots, and overhead door checks. Catalog is 6 x 9. 58 pp. The Oscar C. Rixson Co., 1210 Architects Bldg., New York City.

The Control of Lighting in Theatres.—Attractive booklet illustrated in color covering modern theatre lighting. Specifications, tables and much useful engineering data. 32 pp. 8½ x 11 in. Frank Adam Electric Co., St. Louis, Mo.

Also published by the same firm Bulletin No. 29, describing full line of standardized panel boards. 16 pp. 8½ x 11.

THE CATHEDRAL at Amiens, erected between 1220 and 1228, is perhaps the finest church of Gothic architecture in France.

Earl Horter's charming Eldorado drawing, made in November, 1923, is especially interesting because it shows that the war damage has been almost wholly repaired and this classic cathedral restored to its former grandeur.

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Wanted at Once: Architectural Draftsman, one with terra cotta or stone plant experience. None other need apply. Steady work and best wages. The Arnold Stone Co., Jacksonville, Fla.

Wanted: Architectural draftsman with sufficient training to be able to make working drawings from sketches. Will pay straight salary with bonus based on amount of work turned out. This is an opportunity for the right man to work into partnership. State qualifications and salary expected and how soon can report for work. John T. Gillig, 10 Union Station Bldg., Lexington, Ky.

Wanted: Eight draftsmen of ability and experience, interested in high class work in Medieval styles. Give full particulars as to training, experience and salary. Comes, Perry & McMullen, Renshaw Bldg., Pittsburgh, Pa.

Architectural Draftsmen Wanted: High grade men, experienced on general commerical work. Students and tracers need not answer. State qualifications, salary and address to reach you in arranging for interview. Smith, Hinchman & Grylls, 800 Marquette Bldg., Detroit, Mich.

The Board of Education, Philadelphia, require architectural draftsmen with at least 5 years experience, ability to make details and working drawings. Reply by letter only to John D. Casell, Supt. of Bldgs., 19th Street above Chestnut, Philadelphia, Pa.

Wanted: A competent man to write specifications and check drawings in an important New York architect's office. Must be a man who is very thorough. Steady position guaranteed with a good opportunity for advancement. Box No. 1007 care of Pencil Points.

Wanted: Three good men, one captaining and two good snappy general draftsmen. Will pay transportation in getting any such men to Maimi and if not kept at least six months will pay transportation back to New York. Wire night letter collect, qualifications and salary expected and how soon can come. Walter C. DeGarmo, 39 S. E. 6th St., Miami, Fla.

Wanted at Once: Young man capable of preparing working drawings from sketches and detailing; one who is quick and accurate. Will refund transportation to West Palm Beach. Harvey & Clarke, Guaranty Bldg., West Palm Beach, Fla.

Wanted: Architectural draftsman at once having not less than five years office experience. Position will be permanent. Geo. Barkman, Reily Block, Hamiliton, Ohio.

There is a good opening with a New York City architect for a man of more than ten year's experience who is an A-1 designer, capable of working up schemes—strong at "parti." Box WLC care of Pencil Points.

Draftsman Wanted: General draftsman, young man preferred, with ability to turn out working drawings. Address Equitable, care Pencil Points.

Wanted: Two or three first class architectural draftsmen. Must be capable of estimating, making shop drawings and schedules. Will pay as much a you can earn anywhere. Appalachian Marble Co., Knoxville, Tenn.

Experienced man, now in charge of office, will take over making of complete working drawings of small jobs or other night work. Box No. 4063, care of Pencil Points.

Wanted: A capable designer and all around draftsman for a permanent position in an established office in the middle west. Would also consider application of architectural engineer who can make general working drawings. Address HWW, care of Pencil Points.

Position as executive, superintendent or chief draftsman wanted. Wide experience in all classes of work around New York. A responsible position with adequate compensation desired. Box No 155, care of Pencil Points.

Young man wishes position in architect's office. Willing to do anything in order to get in a good office. C. P. Wood, 775 E. 19th St., Brooklyn. Phone Mansfield 0441.

Water color perspectives pencilled in and rendered in full color. Expert services, rapid tentatives, sketches for your approval free on receipt of data. Address Artist, 725 Kearny Ave., Arlington, N. J.

Position Wanted: Young man, 18 years of age wishes position as junior draftsman. Attending Cooper Union evenings. Six months experience in tracing and detailing. S. J. Pellegrino, 1989 Amsterdam Ave., N. Y. C.

Young man wishes position in the office of small architect. One and a half years experience, second year technical school. Salary to suit employer. Address Thomas, care of Pencil Points.

Wanted: Position as senior draftsman. All around experience of 20 years. Designer and detailer. Would consider partnership. Twelve years member of the A. I. A. Washington, D. C. Highest references. Salary not as much an object as desirable position. Box No. 1040, care of, Pencil Points.

Draftsman capable of laying out working drawings from sketches, neat and accurate tracer, 24 years old, wishes position in Middle West, vicinity of Evansville, Indiana preferred. Address Indiana, care of Pencil Points.

Architectural designer and draftsman seeks position with reliable architect. Would prefer locating in south. Experience in public and commerical buildings, also schools and residences. 35 years old, unmarried. Prefer position with some superintending. Salary $60 per week. Box No. 1645 care of, Pencil Points.

Junior draftsman with experience on tracings, framing and other plan work. Four years experience as carpenter and one year foreman. Can take quantities off correctly. High school graduate and one year college, wishes position with contractor or architect. Any locality. Peter Rutsey, 37 Lafayette Ave., Brooklyn, N. Y.

Young Lady, junior draftswoman, thoroughly competent and good executive wishes position. Highest references. Address Box MD, care of Pencil Points.

Graduate architect with two years experience desires permanent position in the middle west. Can handle general working drawings and concrete and steel design. Address ABH, care of, Pencil Points.

Young man, 18 wants position in architect's office. Good knowledge of architectural drawing. Graduate of H. I. T. Ambitious and wants to get ahead. Salary no object Hyman Goldsmith, 34 Varet St., Brooklyn, N. Y.

Specifications typewritten on short notice; reasonable rates. Charles Fallon, 417 Fifth Ave., New York City. Phone Caledonia 9229.

Young man, 26 years old and single, recently arrived from Germany desires position with construction firm or architect. Have had 6 years experience in architectural and construction work and left the building construction school in Germany with highest honors. Best references. Speak but very little English. Will Bergner, 178 Ferry St., Lawrence, Mass.

Architectural draftsman wishes position. Four years technical schooling in Norway 24 years old. Gumar Schjilderup, 433 44th St., Brooklyn, N. Y.

Architectural draftsman, University of Pennsylvania Special 3 years experience, desires position in or near New York or in Connecticut. Salary no object if position is steady and opportunity for advancement. Box No. 7500 care of Pencil Points.

Young lady wishes position tracing and filing. Eugene Day, 134 West 73rd St., New York City. Phone, Endicott 5226.

Junior Draftsman position in New York City wanted by young woman with some experience; Beaux Arts Student. References and samples of work submitted on request. Box L. S. care of Pencil Points.

(Continued on Page 92)

·PENCIL POINTS·
VOLUME V MAY 1924 NUMBER 5

THE DRAFTSMAN WITH A JOB

SOMEONE, a while ago, defined an architect as "a draftsman with a job." There is a lot of truth in this definition as no one can set up in business for himself as an architect without a client. It may occasionally happen that a man qualified by training to practice architecture provides himself with an office and hangs out his shingle and waits for some business to turn up, but it is usually done the other way around.

The ranks of the profession are recruited from the ranks of the draftsmen. This is a natural evolution and is taking place constantly in all parts of the country. Even before a man sets up for himself he frequently handles work "on the side," usually with the knowledge and approval of his employer and frequently with the active help of the architect for whom he is working. Many architects feel that the experience gained by their drafting force in meeting and dealing with clients and in having direct responsibility, for even a small job, makes them better and more valuable men in carrying out the work of the office. Some other architects do not encourage such outside work because they feel that it interferes with the draftsman as an employee, diverts a certain amount of time and attention from his regular work, necessitates night work, tending to make the draftsman less efficient the next day, etc. Even in those cases where the architect is in sympathy with the draftsman with a job he often feels that he is subjected to a certain amount of inconvenience such as having contractors call up on the telephone during business hours, consultations with the client, etc.

The draftsman with a job to do "on the side" usually finds that the inconvenience of working at home evenings and consulting with his client in a restaurant, railway station or other public place at lunch hour with none of the usual facilities for carrying on architectural work makes it almost impossible to do such work successfully or profitably, not to say with any degree of pleasure or satisfaction on his part.

It has been suggested to us that a decided improvement in the situation as it exists today might be brought about by providing, at a reasonable cost, facilities for draftsmen doing outside work to conduct this business entirely apart from and outside of the office where they are employed. In any large city suitable quarters might be secured with room for several drafting tables with a telephone operator and a stenographer in attendance; a conference room, which could be used for interviewing clients and contractors and which could be kept open at night for the convenience of those desiring to work after hours. Several draftsmen have expressed to us an interest in such a project and have asked our opinion as to the best way to proceed in New York City. We have asked the opinions of several architects as to the advisability of something of this sort and find them entirely in sympathy with the idea. The men interviewed all recognize the fact that such outside work will always be done by good draftsmen, believe that such activities should be encouraged and feel that a drafting room such as is above described would put the entire work on a better basis from every standpoint. Such a plan would regularize a business of considerable proportions which is now conducted in a more or less hit-or-miss fashion.

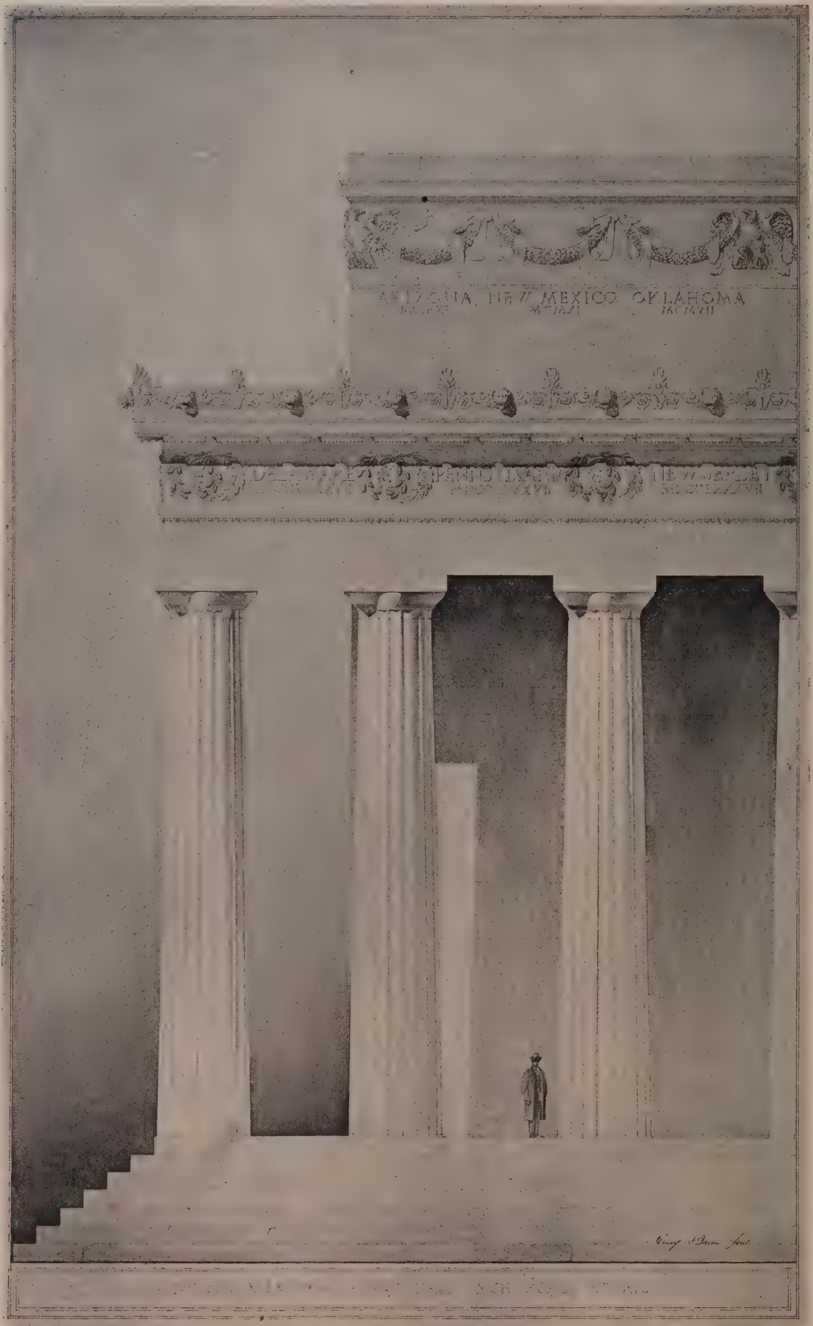
We should like to hear from our readers, both architects and draftsmen, setting forth their opinions, together with any suggestions that may occur to them concerning details of procedure. Would such a co-operative drafting room be a good thing for the draftsman with a job? Would it be a good thing for the architect?

OUR FOURTH ANNIVERSARY.

THIS is the forty-eighth issue of PENCIL POINTS—the end of our fourth year. We cannot let this milestone pass without most heartily thanking all who have made our growth possible and expressing to our subscribers our gratification with the wonderful spirit of co-operation which has been so generously given. You have not only read our paper in constantly increasing numbers, (our present subscription list is 11,449), but you have been most helpful in offering friendly criticism, making valuable suggestions for the improvement of our work, and have made it possible for us to do what we said four years ago we wanted to do—edit and publish PENCIL POINTS *with* rather than *for* our readers.

We enter our fifth year in the same humble spirit with which PENCIL POINTS was started. We are here to serve and we are just as anxious as we ever were to publish, month by month, a better journal for the drafting room, a journal that will help every reader in the problems of his profession, and a journal which at the same time shall publish the news of the field and record those items which are of interest from a purely human as well as from a professional standpoint.

We cannot too strongly emphasize our wish to hear from every reader, wherever located, and whatever his status may be. We are just as anxious to hear from a young draftsman located thousands of miles from our office as we are from a big architect just around the corner.



Detail of the Lincoln Memorial at Washington, D. C., Henry Bacon, Architect.

HENRY BACON AS A DRAFTSMAN

BY FRANCIS S. SWALES

HENRY BACON had only reached his zenith as a draftsman as well as architect at the time of his death. Obviously a man may become a great draftsman without becoming a great, or even near-great artist or designer. Equally obvious, a great artist may ride on a poor vehicle: Whistler was a poor draftsman. David Gregg knew the science of the beautiful in art from start to finish; but it was neither from intuition nor inspiration that his work, starting with a hard and mechanical technique and academic method, grew in its way to a close approximation of fine art. Henry Bacon's early drawings and sketches were often rather dry, but never hard in technique. They always indicated an understanding of the truth of things without a course of reasoning and his development as a draftsman was continuous.

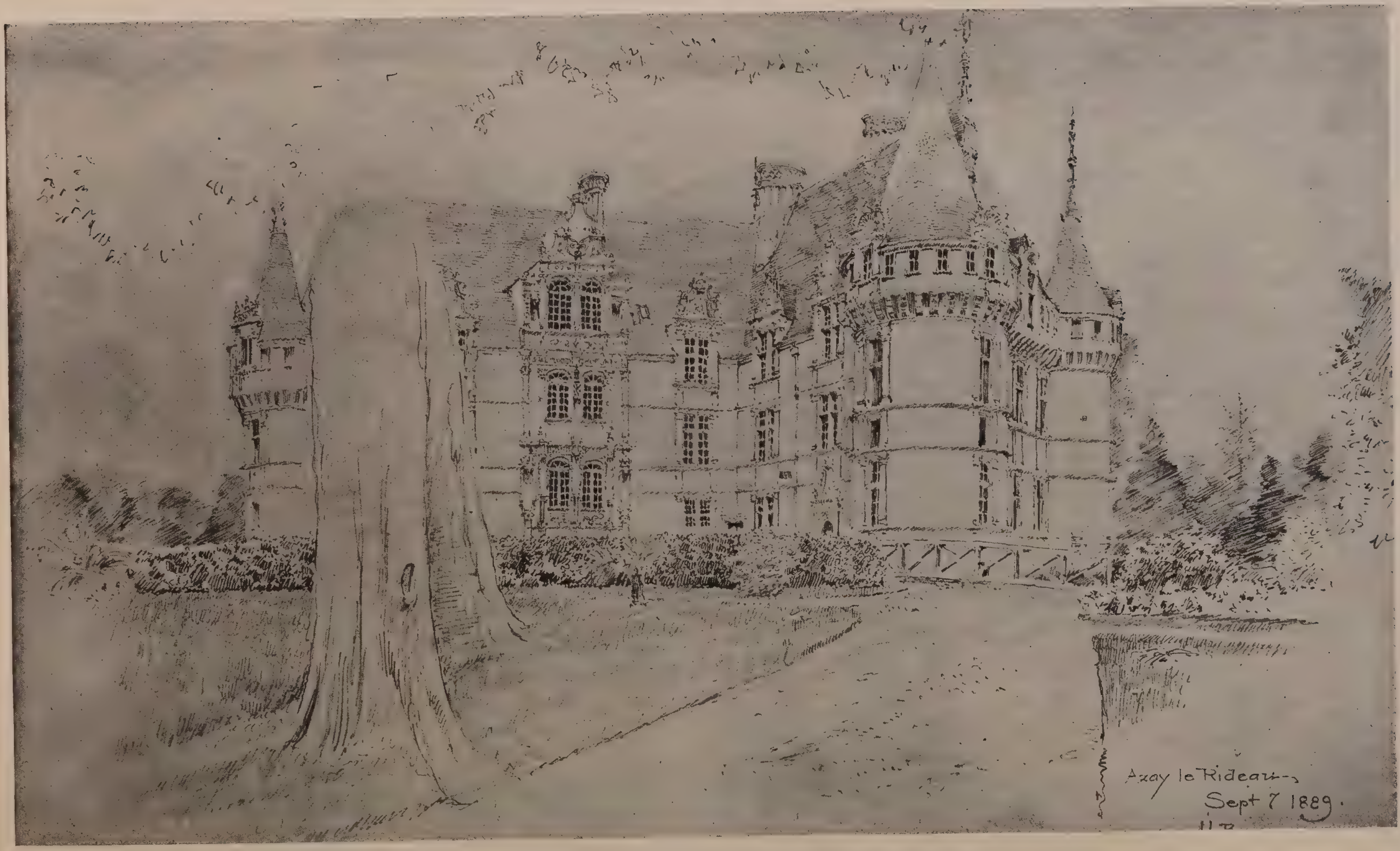
Henry Bacon.

Henry Bacon was interested early in his career in the first architecture in the United States. He made sketches and measured drawings of details of Colonial buildings at Boston and New York during the late eighties, some of which were published in the old "Sanitary Engineer," before he went abroad as the Rotch Travelling Scholar in 1889. These were mere drawings by a young draftsman and interesting more by reason of the subject selected for representation than for the way it was represented. He made a few drawings probably under the tutelage of his elder brother, Francis Bacon, for the latter's illustrations (made during 1881-1883) of the book on the restoration of Assos, published by the American Archaeology Society at Cambridge, 1902, and that master draftsman, and keen artistic student of Classic design undoubtedly gave early formative suggestions that led to the influence of Greek Design, upon some of the later work of Henry Bacon.

During the early years he spent in the office of McKim, Mead and White his name often appeared on their perspective drawings. Some of his pen-and-ink drawings of houses published in the "Engineering Record's" architectural supplements, and a wash or color drawing of the perspective of the Boston Public Library displayed rapid development of a personal style of presentation which soon reached a high level which was maintained with steady growth of feeling as long as he lived. The sketches which he made while abroad on the Rotch Scholarship indicated the coming of a strong architect rather than of a brilliant draftsman. It is not for their technique that they have their greatest value to the student although they are good drawings made with a good line and good use of values and color.

But in excellence of judgment in selecting a point of view—with the evident object of studying truthful effect: avoiding the dramatic, which adds impressiveness and suggests imagination in the sketcher, and the various "tame" or less interesting compositions which every architectural object presents—he has had few peers among students in sketching architecture. To illustrate the point, compare his sketch of the Chateau-Azay-le-Rideau, herewith reproduced, with the many sketches, photographs or plates of the same subject in almost any architect's collection. His sketches all record objects worthy of study, and his studies are made from the worthiest point of view.

During the later years of his collaboration in the organization of McKim, Mead and White certain of his subjective drawings showed the same keen sense of the essential point of view. The Rhode Island State Capitol, the design of which proclaims his individual influence and part in its production: and, as with his design for the Detroit Court House, his previous study of American Colonial architecture—particularly Old City Hall in New York—has never appeared to such advantage in a photograph as in his



Azay-le-Rideau. Pencil Sketch by Henry Bacon. (1889.)

drawing of the perspective. I have often wondered, too, whether the forecourt to Columbia University's beautiful Library, will be as much improved when the great grille is added, as it would seem from studying the superb perspective drawing made by Bacon. His individuality in technique of pen-drawing is evident in both of the above drawings; but is at its best in a beautiful drawing which he made of the Robert Gould Shaw Monument, in front of the State House at Boston. The view is taken from a distance so that the monument is well-set in the accessories of the landscape. The beauty of the trees, as shown by the drawing, complementing that of the monument present a study of civic ornamentation equal to the finest that old Italy or modern Paris possesses. Somewhat loose in technique, especially in the foreground, but nevertheless a charming presentation, his drawing of a "Bachelor's Hall"—a solid hospitable country house in the style of "Carpenter's Classic" shown overlooking a river away from the whir of street traffic and the din of life on the highroads—not too secluded, only slightly aloof, friendly and dignified: in character like Bacon himself. His perspective drawing of the Jersey City Library showed the design of the building to great advantage in spite of an, apparently, hurried sketching of the foliage and buildings in the background. His spirited sketch for the Hall of History for the projected American University Group at Washington was a drawing such as is produced when a draftsman is in great form—one of the kind that look as though they could be "made in ten minutes"—or a few hours—but probably required, actually, several days.

"Why Cornhill is Crooked." Pencil Sketch from Henry Bacon's Scrap Book.

He was but one of a number of designers who worked on the Burnham-McKim-Olmstead Plan of Washington; but he made a deep impression in the memory of Mr. Burnham. Apart from his objective sketches he seems to have seldom used watercolor as a medium of expression. His friend, Jules Guerin, could do that better than he, and a sympathy in color appreciation by the two artists made co-operation easy. Again, he seems to have studied or at least drawn, the human figure, and sculpture generally, rather less than might have been expected—especially as during the later part of his career he designed so many monuments—all distinguished by reserve and grace; but that, too, may have been due to full recognition that his usual collaborator, Daniel Chester French, could do that part of the work to his entire satisfaction. The three men, Bacon, French and Guerin, have produced a monument to collaboration of artists as well as to the great Lincoln. That he made occasional figure sketches, and had a sense of humor is shown by the cartoon reproduced herewith, entitled, "Why Cornhill is Crooked"—note the "plan," "front" and "side" elevations, the side being "projected" from the front.

In his studies of the Lincoln Memorial it is worthy of record that he made the actual diagrammatic drawings from which the structure was built. The drawings of the plan at 1/8" scale and elevation at 1/2" are made with the exactitude and fineness that might be expected from an Ictinus or Callicrates had they made line drawings for the Parthenon—perhaps they did! They serve to show that Bacon could get down to the drafting board and go through the tedious and nerve-taxing strain of making a thorough set of fine working drawings, and could resist the commercial call to profit by "hiring" somebody else to do the work that might not be quite as good as he could do himself.

The elevation of the bank at Waterbury, Conn., is another example of excellent workmanship upon a minor problem; and the details of the sarcophagi of the Hanna Mausoleum, at Cleveland, O., go on to demonstrate that he not only made the general drawings but also made finished working drawings of the details.

In some of his quite recent work, such as the Town Hall and Public Buildings reproduced among the illustrations, things that were in hand when he suddenly passed away—his draftsmenship is at its best. The drawing is expressive of the greatest

Pencil Sketch of Chartres Cathedral by Henry Bacon. (1889.)

Front Elevation of a Town Hall Showing Future Extensions. Henry Bacon, Architect.

ease in its production; swift, positively directed pencil strokes, beautifully blended washes of delicate color, a soft, pleasing effect of modelling and of texture.

Of his record as a student and as an architect and of his winning personality much has been written and still more is being, and will be recorded.

Mr. C. H. Blackall, Chairman of the Rotch Scholarship Committee states:

"Mr. Bacon was the sixth holder of the Rotch Travelling Scholarship, it being awarded him in 1889. When it became known among the young men here that he was intending to compete for the Scholarship nobody else would take the examinations, as there was a general feeling that he was by far the strongest man here and would be sure to get it. Consequently he did the whole thing by himself, taking his preliminaries and working out his projet.

"An item that may be of general interest is that he and his brother, Frank Bacon, married sisters. Frank Bacon met his wife while he was on the Assos Expedition in the Dardenelles. I think, Mr. Calvert, the father of his wife, was English Consul there at the time, but I am not quite sure. Henry Bacon became engaged while he was on the Scholarship.

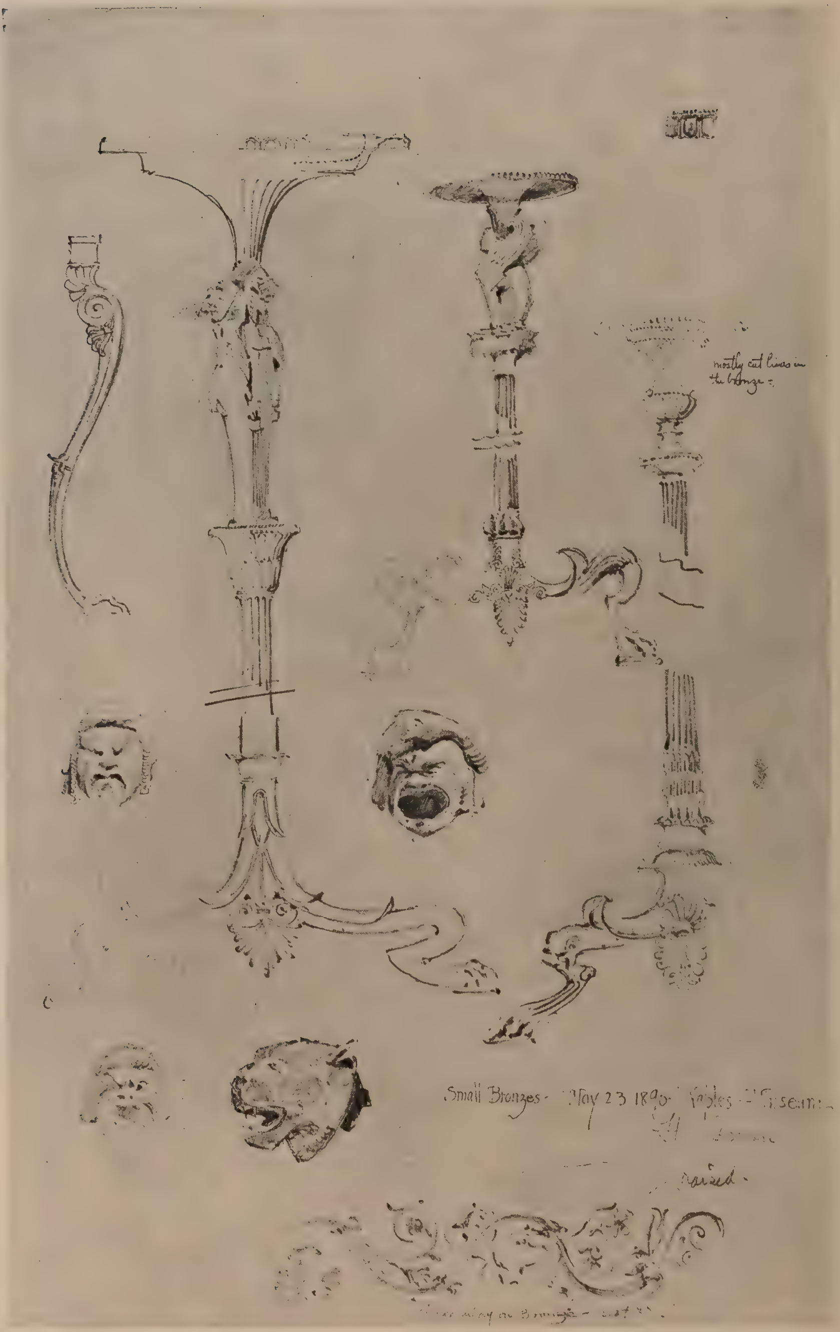
"There have been several statements that Henry Bacon graduated in architecture at the University of Illinois. This is not correct. He was in the University in 1884 and 1885, but did not graduate.

"I find on our records that he was born at Watseka, Illinois, November 28, 1866. He entered the offices of Chamberlin & Whidden in Boston, and later went with McKim in New York, 1885-1889. After his return from the Scholarship he went back to McKim's office. In 1895, with James Brite, he won the first prize of $6,000 in competition for an Art Gallery in Fairmount Park, Philadelphia. In 1897 he formed a partnership under the name of Brite & Bacon. Brite & Bacon were awarded both first and second prize in competition for the Jersey City Public Library in 1898. The Brite & Bacon partnership was dissolved in 1902."

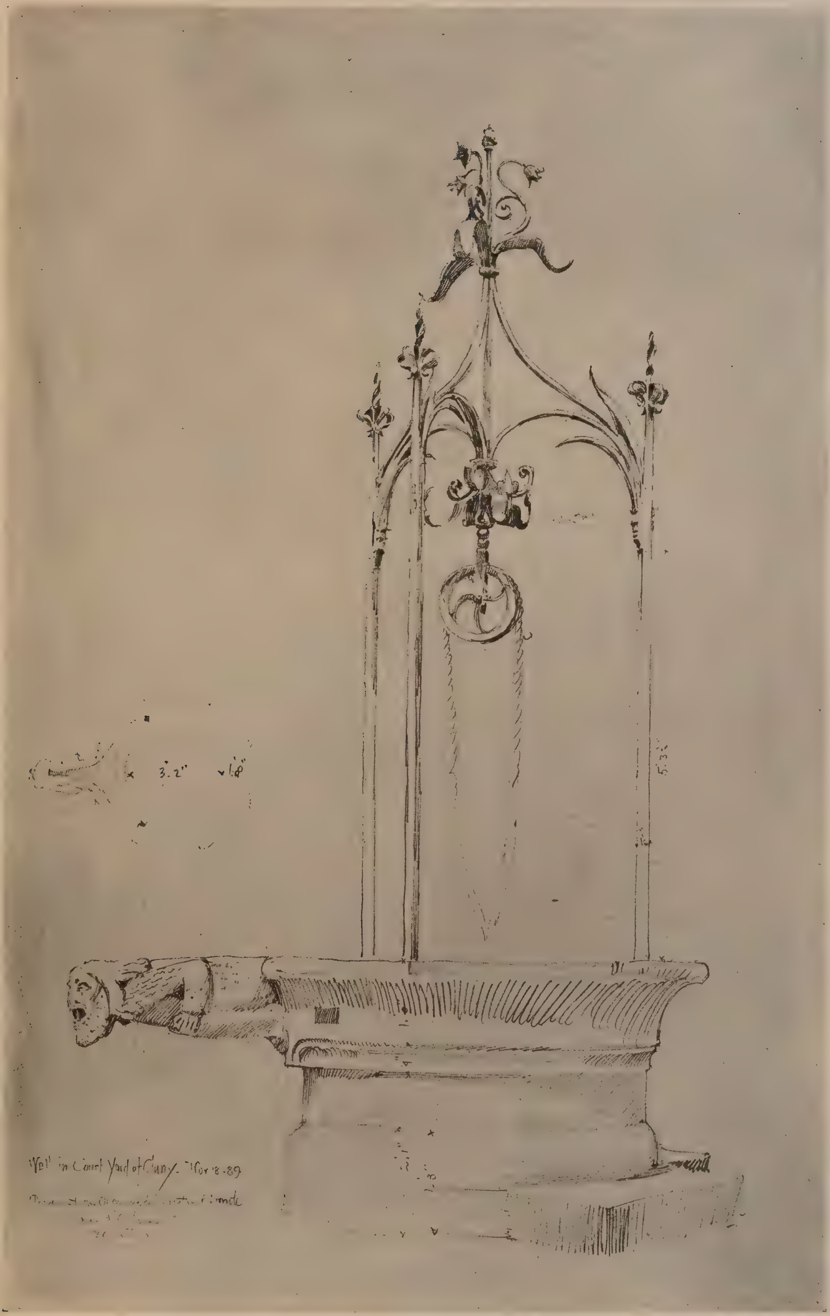
"In 1892 he went to Chicago and worked for nine months on the World's Fair work and also on the work done for the Fair by McKim, Mead and White, after which he returned to New York."

The writer's first meeting with Henry Bacon occured under a happy circumstance. A group of young fellows was congratulating Bacon upon some great good news that had come to him. "Harry"—everybody seemed to call him by that name—I do not recall ever having heard him referred to as "Henry," by his associates—"Harry," said a smiling friend, "has won the competition for the Art Museum at Philadelphia." "Harry" was being jollied and was laughing at the banter of the garrulous, pleased and excited young men surrounding him. The general hilarity was a tribute to his popularity and good standing with his associates in the drafting room, for most of the group came from the office of McKim, Mead and White where he and his associate, James Brite, (for the competition was won by the firm of Brite & Bacon) were, or had lately been, employed.

The firm of Brite & Bacon established itself in 1897 and produced several interesting and excellent designs: a competitive design for the New York Public Library; a design for the American University at Washington; a competitive design for the Wayne County (Detroit, Mich.) Court House; various public libraries including their successful competitive design for the Jersey City Public Library; a number of successful residences in both city and country, and other items of passing interest. Bacon's individual feeling was always apparent. Various phases of architectural style suggested one


mostly cut lines in the bronze =
Small Bronzes - May 23 1890 - Naples - Museum -
raised -

Pencil Sketches by Henry Bacon. Small Bronzes in the Museum, Naples.


3.2"
1.8"
5.3½
Well in Court Yard of Cluny. Nov 8-89

Pencil Sketch by Henry Bacon. Well in Court Yard of Cluny. (1889)

Pencil Sketch of the North Portal of Chartres Cathedral, by Henry Bacon. (1889)

or another design, but they were never exotic—never so directly influenced by some other designer's work as to suggest anything approaching copyism.

In 1902 the partnership was dissolved and Mr. Bacon continued the practice alone. He designed the Public Library, and the Memorial Day Nursery at Paterson, N. J.; Halle Brothers' Department Store at Cleveland, O.; the Railroad Station and the Memorial Bridge at Naugatuck, Conn.; General Hospital and Citizens Bank at Waterbury, Conn.; Union Square Savings Bank, New York City; Banks at Chelsea, Mass., and New Rochelle, N. Y.; several buildings and a general plan for future buildings of Wesleyan University, Middletown, Conn.; University of Virginia Gates, Charlottesville, Va.; and many others *all* of importance, because he always did the best he could "with the material at hand." Among them, more than fifty beautiful monuments which he designed in collaboration with Mr. Daniel Chester French; and the following monuments and memorials in collaboration with Augustus Saint-Gaudens: Parnell, Dublin, Ireland; Hanna, Cleveland, O.; Whistler, West Point, N. Y.; Magee, Pittsburgh, Pa., and Governor Flower at Watertown, N. Y.

His setting for the font in St. George's Church, New York, was completed a few weeks before he died. It is a fitting shrine for the spiritually beautiful figure designed by Elsie Ward whose work he greatly admired. In the funeral services for Henry Bacon at St. George's the rector, Dr. Reiland, mentioned this font. The font was Bacon's last work and was built by Henry Hering as a memorial to his wife, Elsie Ward Hering, who died last year. The memorial was unveiled April 13th. Another of his works, almost unknown, but showing his versatility in design, is the alter of the Sacred Heart in St. Patrick's Cathedral, New York, built by the de Navarro brothers to the memory of their mother.

He served as Consulting Architect to the Public Service Commission and the Municipal Art Commission of New York, and on the National Commission of Fine Arts, Washington, D. C.

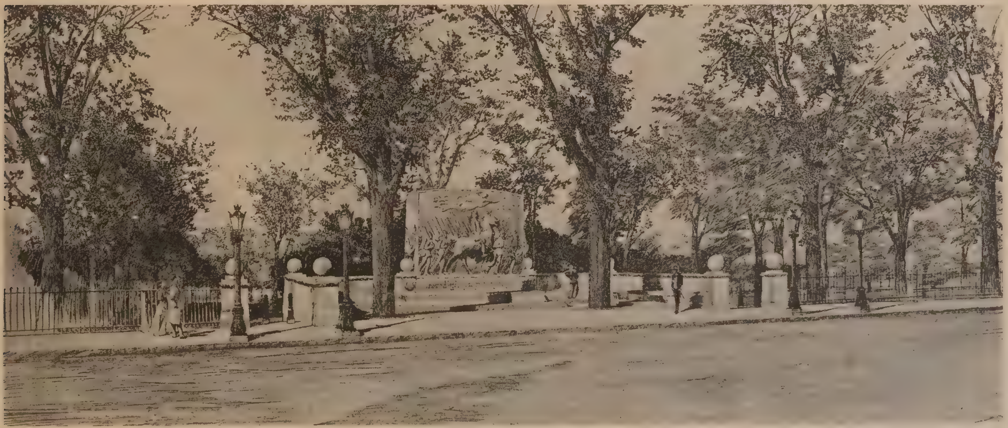
He was awarded a Medal for Merit of design for the Pennsylvania Railway building at the World's Fair, Chicago, 1893. He designed the distinguished Court of the Four Seasons at the Panama-Pacific Exposition at San Francisco, and was also awarded a gold medal for the design of the Lincoln Memorial at that Exposition in 1915. He was awarded the Medal of Honor by the New York Chapter of the American Institute of Architects "in recognition of his distinguished contributions to Monumental Architecture and of his high professional standing."

He received the Gold Medal of the American Institute of Architects in 1923; and the Honorary Degree—Master of Arts—conferred by Wesleyan University in 1920.

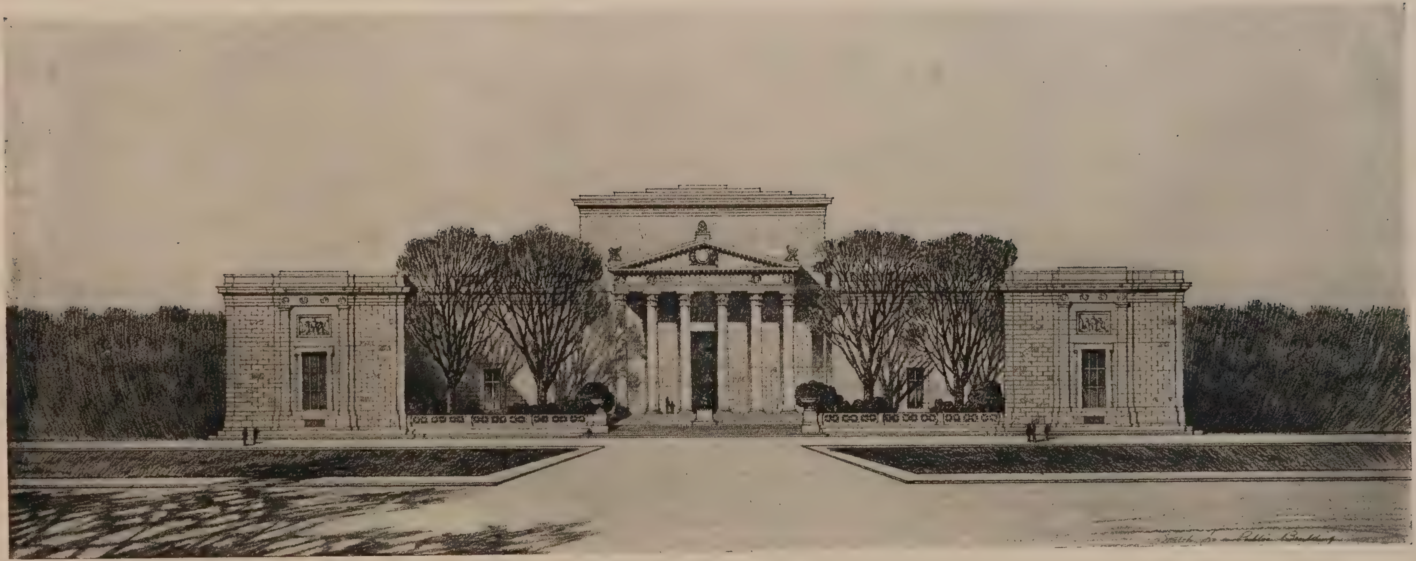
He was a member of the American Academy of Arts and Letters, National Academy of Design, Century Association, American Institute (Fellow), Architectural League of New York and National Sculpture Society.

He played gold, and was a member of the Scarsdale Golf Club. He was also a member of the Players Club—one of its most popular members.

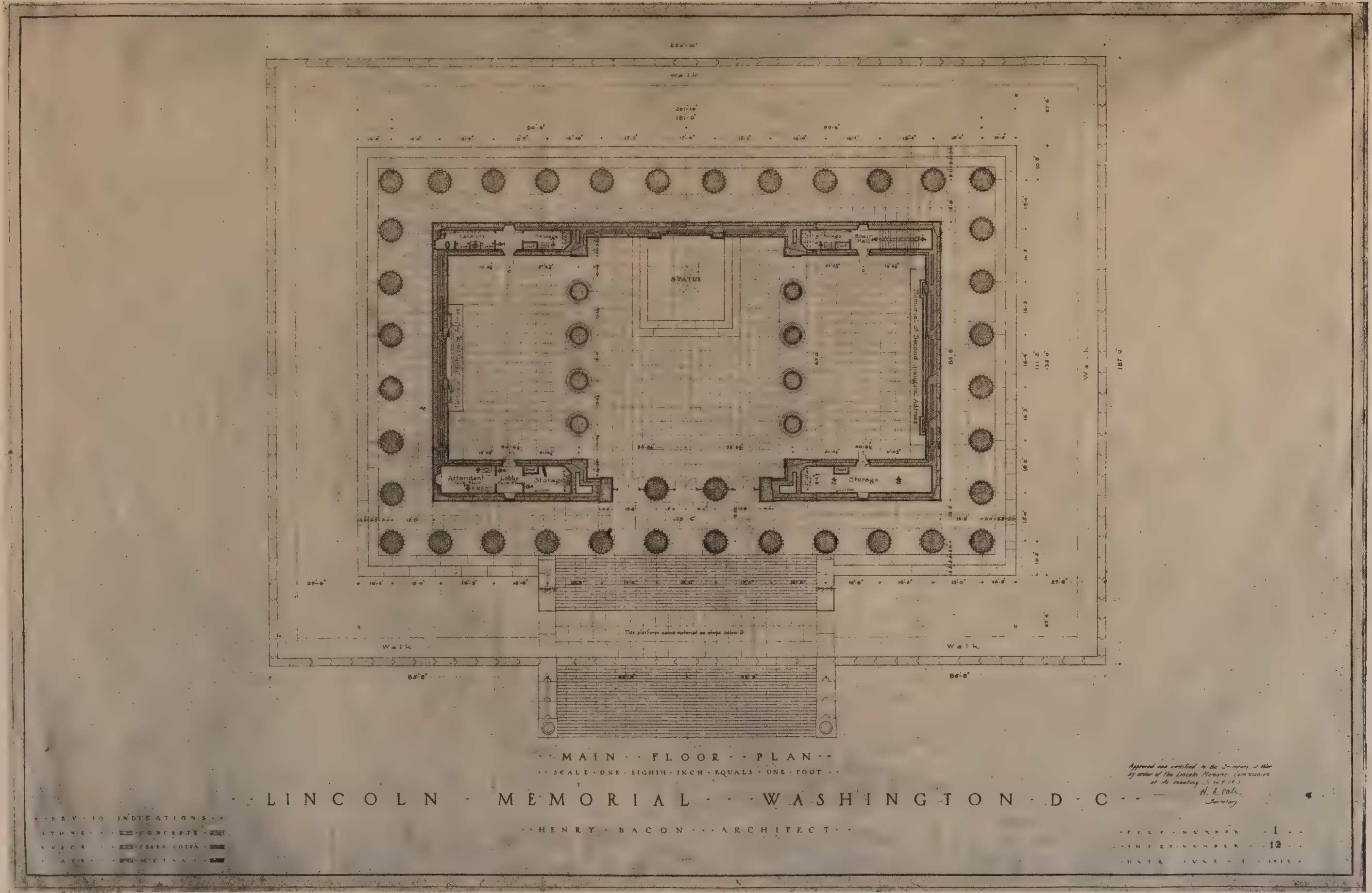
Few architects have ever been shown so many evidences of the esteem and cordial friendship of their *confreres* and fellow-men during their life time. Among such evidences were his nomination by Mr. Cass Gilbert, who was then (if I remember correctly) Chairman, of the Commission of Fine Arts, to be the architect of the Lincoln Memorial. Another instance has been told by Mr. Stephen Olin, in the *Wesleyan Argus;* he states: "More than twenty years ago I went to the office of the famous architects, McKim, Mead and White, (with whom friendship permitted me to take some liberties) and said, 'I am one of a committee charged with building a society house in Middletown. We have little money, but great ambition. Can we find an architect who, combining the talents of Charles F. McKim and Stanford White, has the keenness of



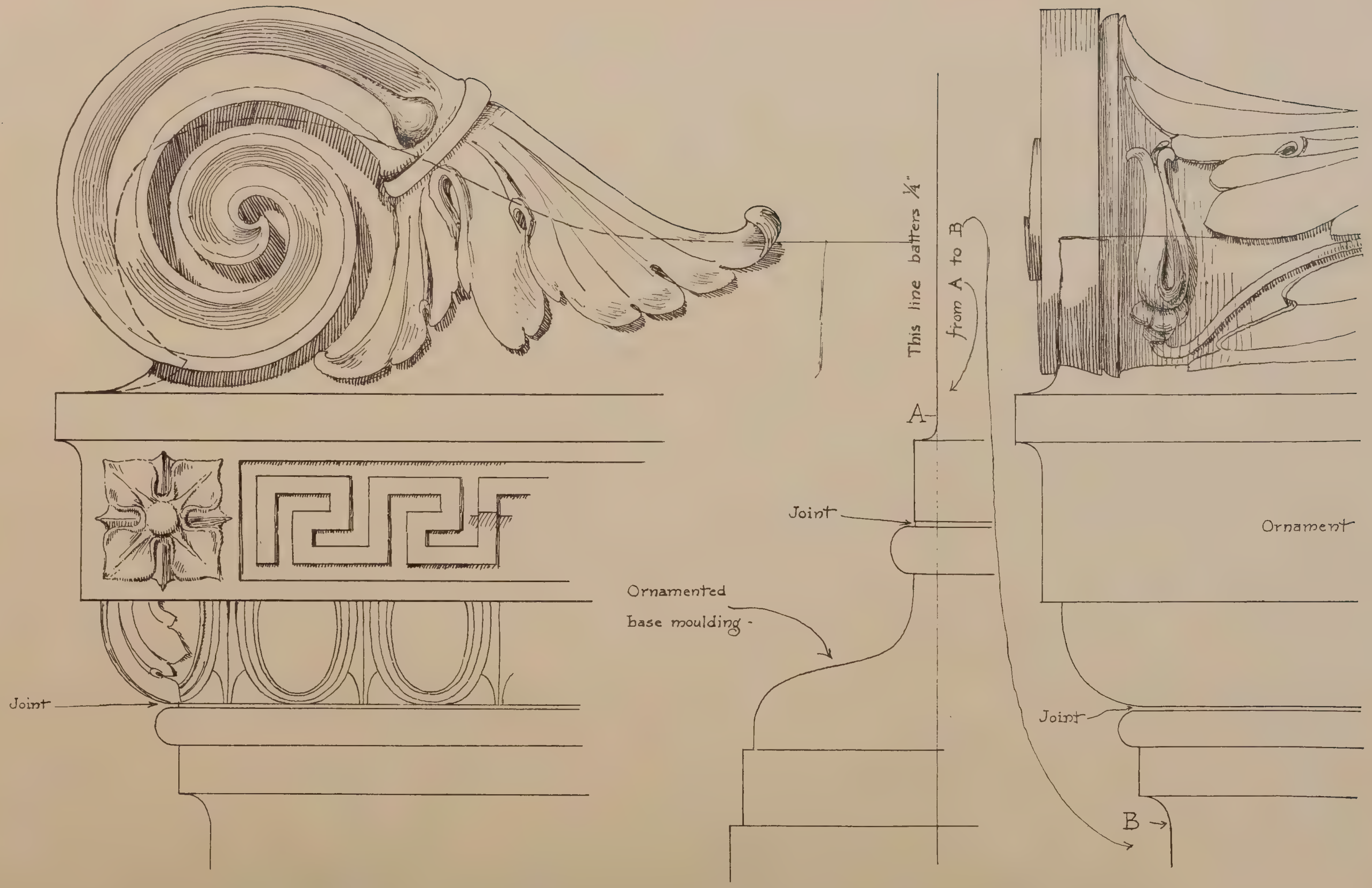
Drawing by Henry Bacon. The Robert Gould Shaw Memorial. McKim, Mead & White, Architects.


Sketch for a Public Building

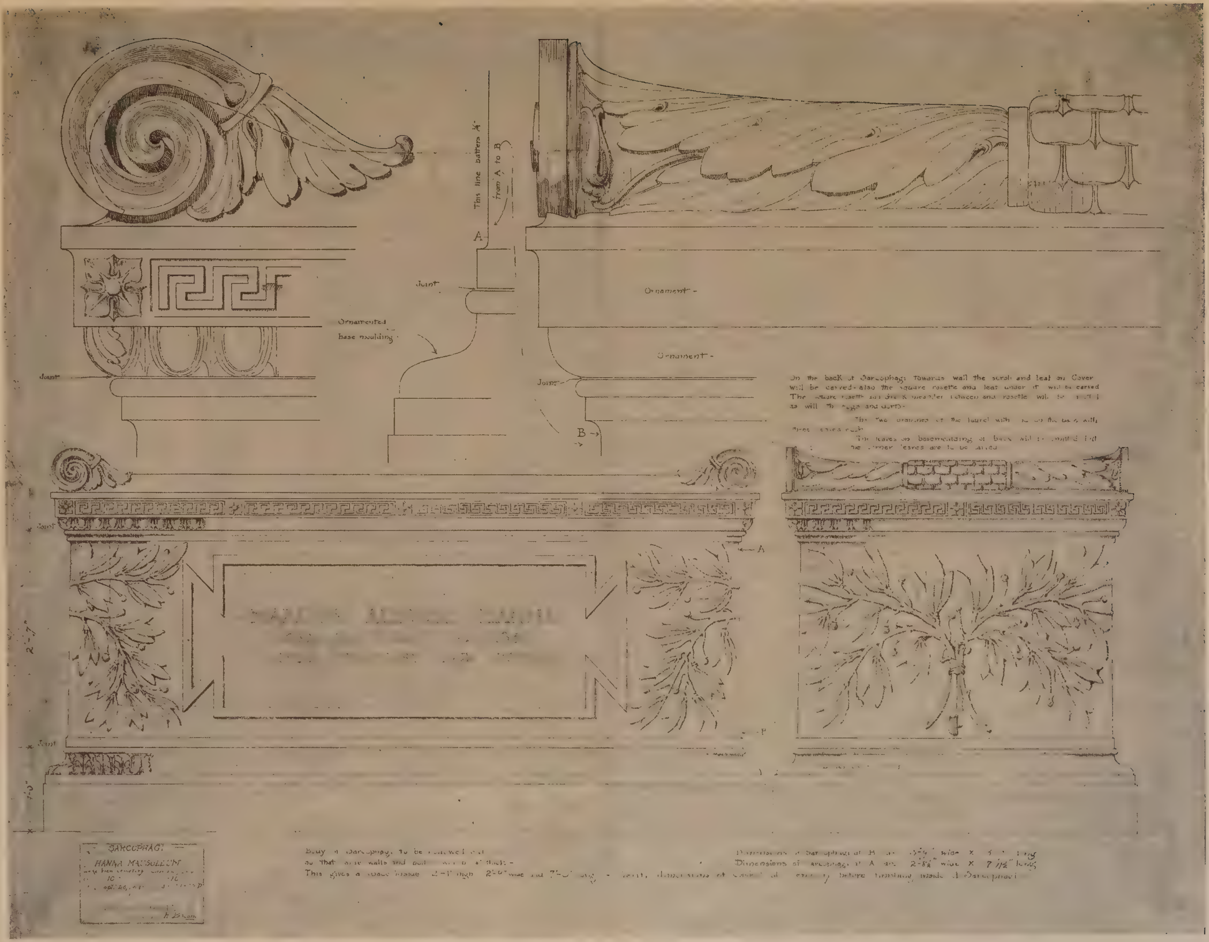
Sketch of Proposed Design for a Public Building, by Henry Bacon.



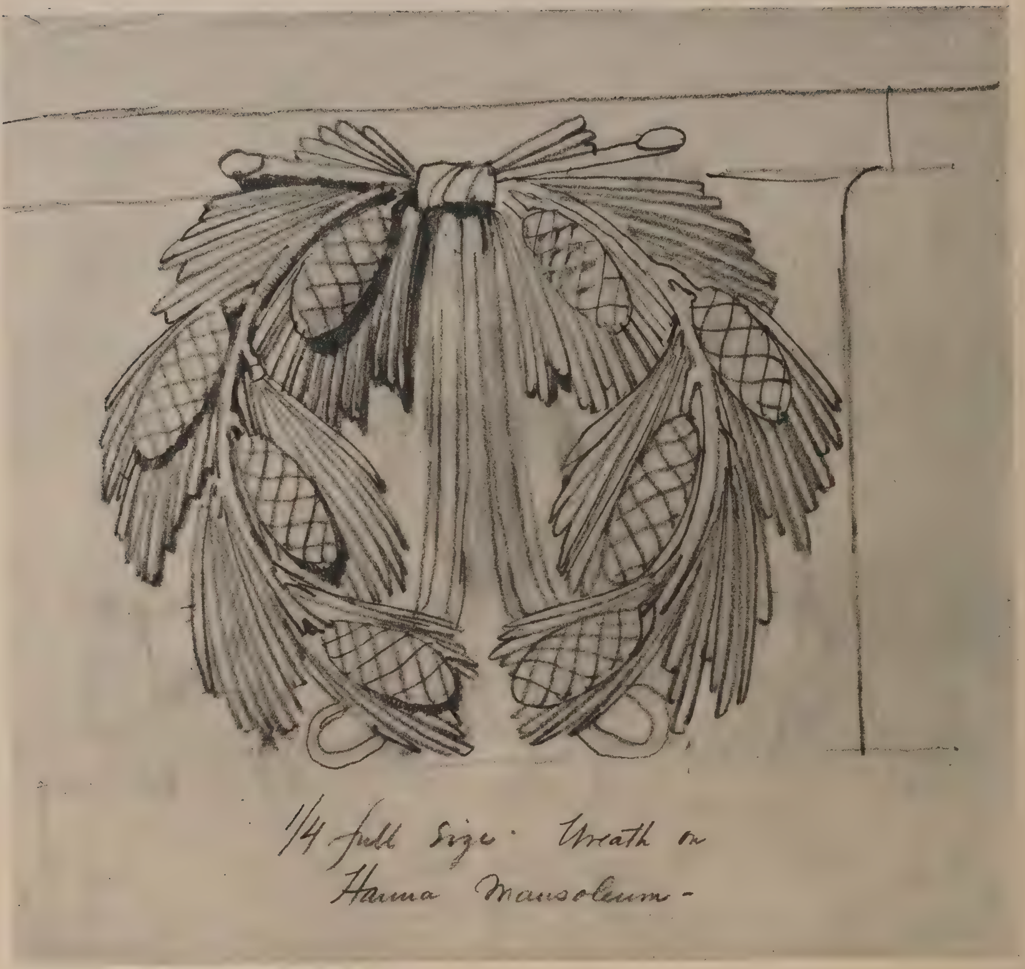
Plan of the Lincoln Memorial, Washington, D. C. Henry Bacon, Architect.



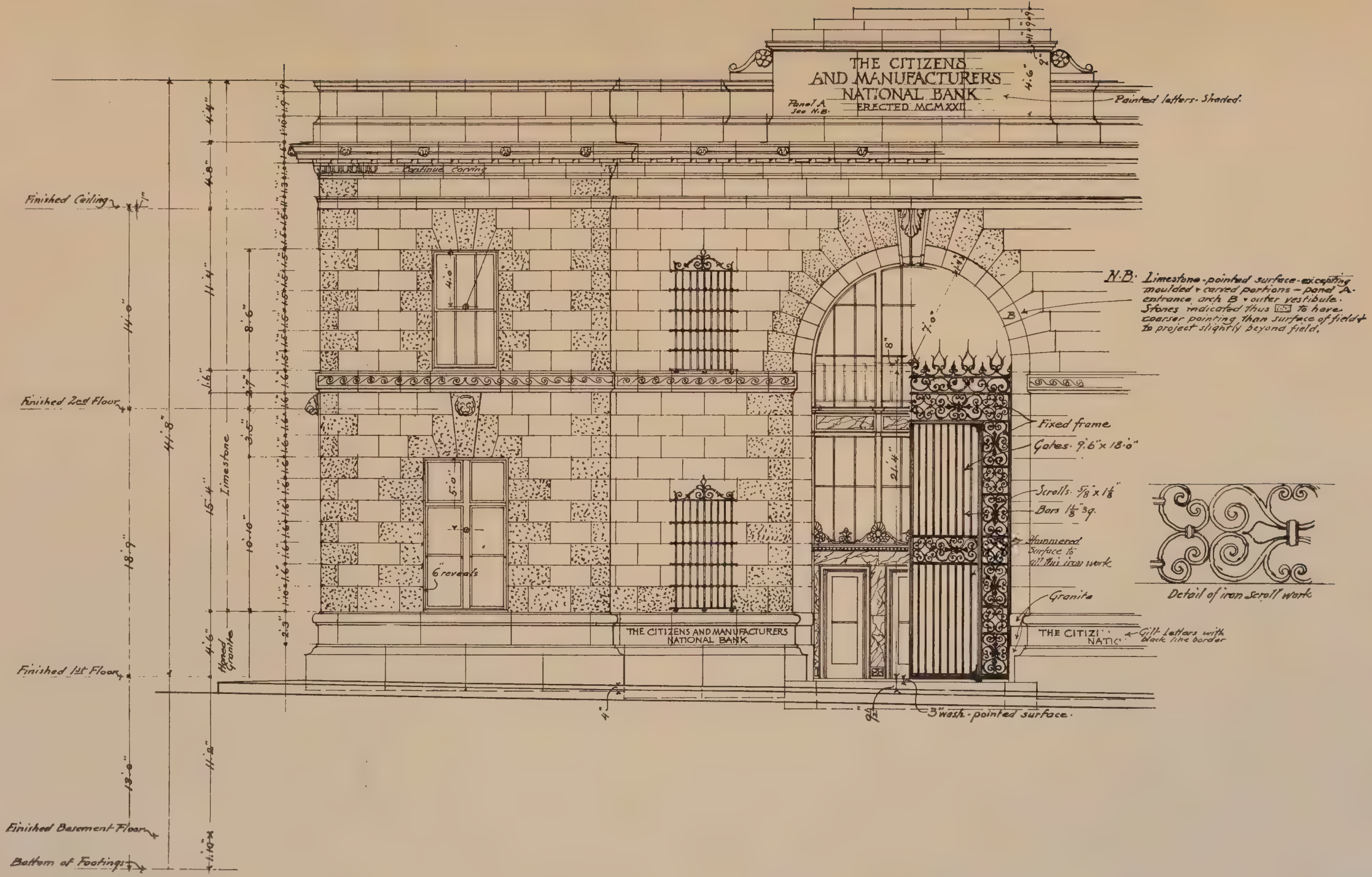
Detail of Drawing Shown on Page 55. Drawing for Hanna Mausoleum at Cleveland, by Henry Bacon.



Drawing by Henry Bacon for Hanna Mausoleum, Lake View Cemetery, Cleveland O.
Henry Bacon, Archtiect.

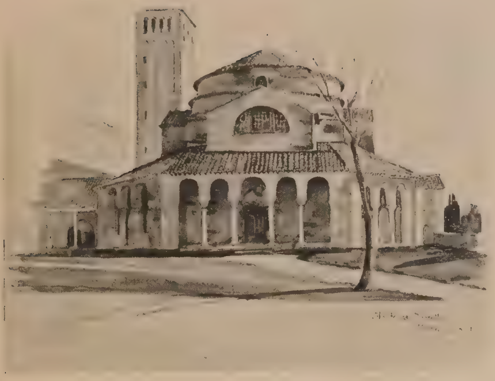


Pencil Drawing of Detail of Hanna Mausoleum, by Henry Bacon.



Drawing by Henry Bacon for The Citizens' and Manufacturers' Bank at Waterbury, Conn. Henry Bacon, Architect.

Water Color Sketches at Venice by Henry Bacon (1891).



Water Color Sketch, Sta. Fosca—Torcello.

the young man whose triumphs are still before him?' There White broke in: 'The man you are looking for is Henry Bacon, who has lately left our office.'" And Mr. Bacon was retained for the work.

A noteworthy gathering of many of the most distinguished of American men and women and some from abroad occurred at a testimonial dinner given at Delmonico's in January, 1922, by the Illini Club, of the University of Illinois, to Henry Bacon, in recognition of his election to the American Academy of Arts and Letters.

During the past several years his offices were located on the 16th floor of the Architects' Building at 101 Park Avenue, New York. It was characteristic of him that on his office door appeared only his name, without the usual title of "Architect." The office gave a sense of spaciousness and orderliness (unusual in most New York offices of architects) and of being more than ample for the number of people using it—for he had but few assistants On the walls were a few good oil paintings: landscapes—one of which is a masterpiece by Guerin—figures and portraits; a bronze plaque portrait of his friend Evarts Tracy by Henry Hering; photographs of the remains of works of classic architecture. The furniture too, is of distinction—as might be expected—and his office, like his sketches and his designs has the effect of containing only the selections of a man with a fine point of view: free from exaggeration and free from the commonplace.

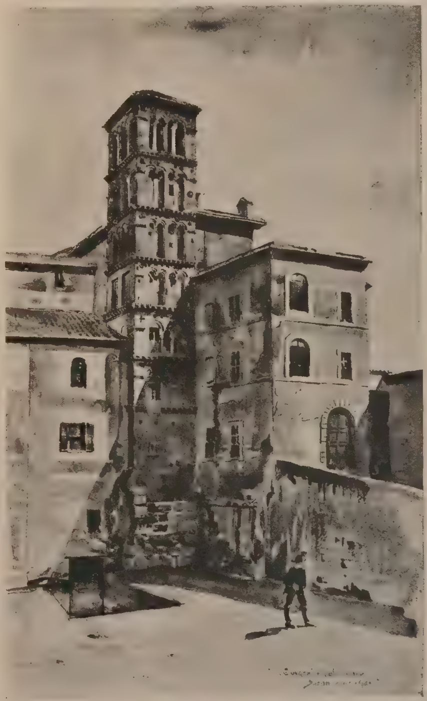
In a letter, he wrote of "my able assistants, Mylchreest, Beninati and Miss Weissler." The last mentioned, his secretary, handled his business problems: correspondence, accounts, etc., which work, as with the painting and sculpture forming part of his architectural design, he seemed to feel was something that somebody else could do to his satisfaction. But once upon a time his secretary needed a vacation—went on a long trip and was gone several weeks. Upon her return she found a beautifully drawn wreath of leaves and flowers, and within it an architecturally lettered inscription: "Welcome Home." Not the least of the tributes to Henry Bacon was unwittingly paid to him by himself. When his will was probated and it was learned that he had remembered his "able assistants."

The passing away of men of prominence always calls forth more or less formal eulogy, and some expressions of sincere regret. There has been very little of the purely formal to be detected in the expressions about the passing of Henry Bacon and a great deal that is unquestionably sincere and heartfelt. He was a man who found or made sincere friends, and the many published expressions of regret at the loss of the man are filled with feeling, not with mere rhetoric. A type of man of which there are few; and of which there are none that the world can afford to lose.

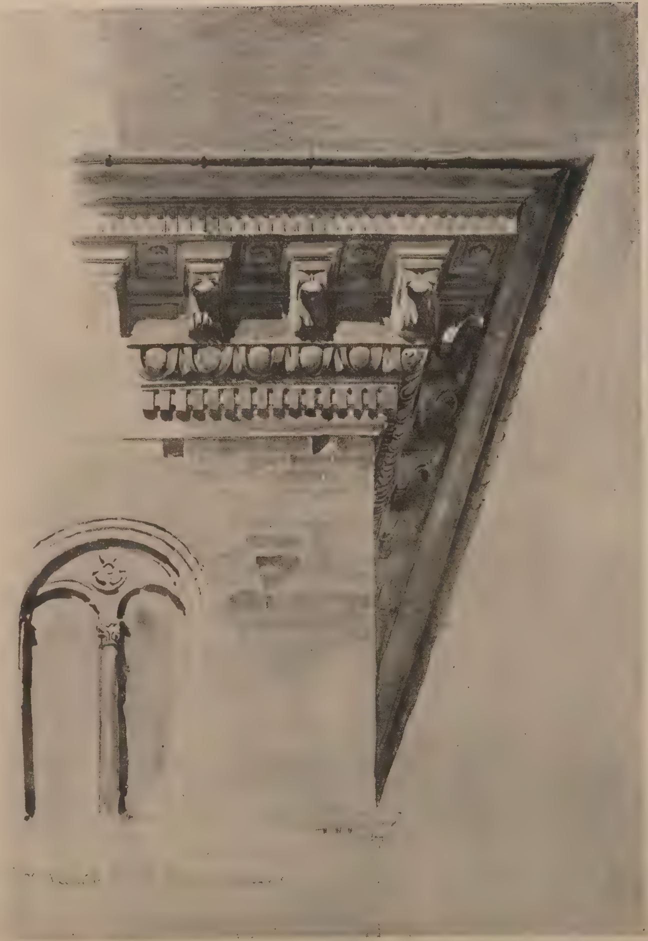
The New York Chapter of the American Institute of Architects, of which he was a member, placed the following resolution written by Mr. C. Grant La Farge on its records:

"As we realize that the friendly voice of Henry Bacon is forever stilled, there come to us reflections of profound significance.

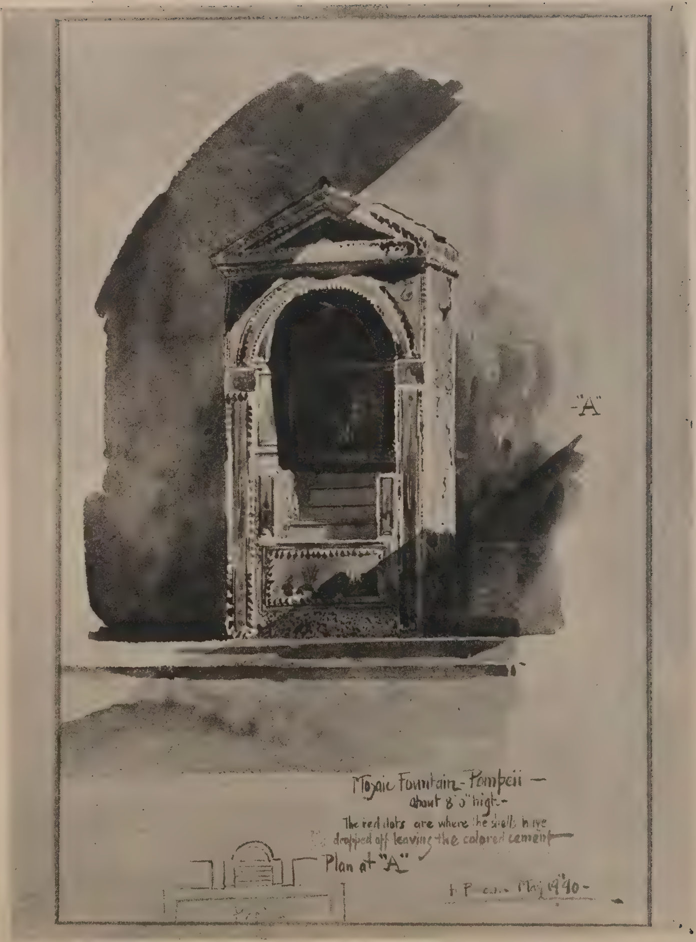
"We recall first how that voice was never raised except in the ways of kindness, never expressed any other humor than that which has no sting. We think of the deep essential sweetness that radiated from the good man. And as affection moves us it is mingled with reverence at the thought of his pervasive modesty, the absence in him of any exploita-



Water Color Sketch by Henry Bacon made in Rome.

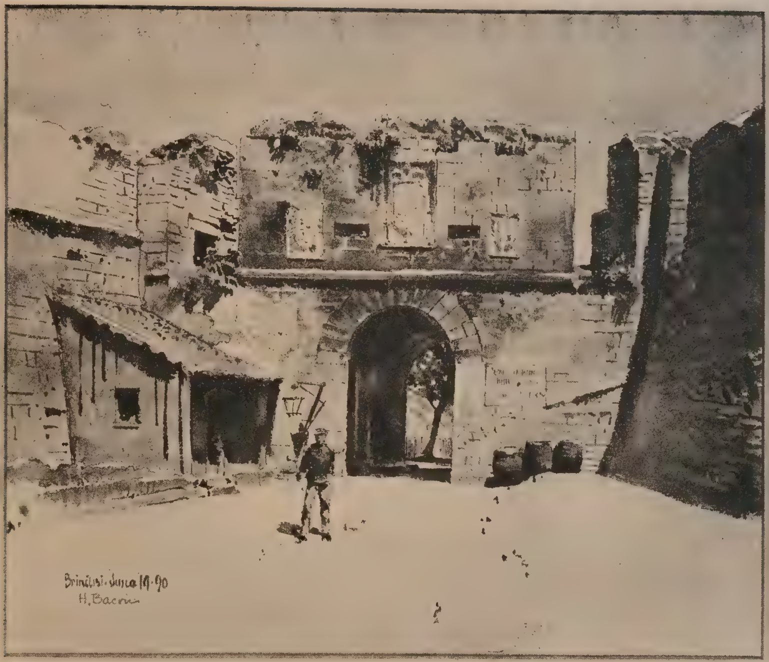


The Riccardi Palace Cornice. Water Color Sketch by Henry Bacon. (1891)

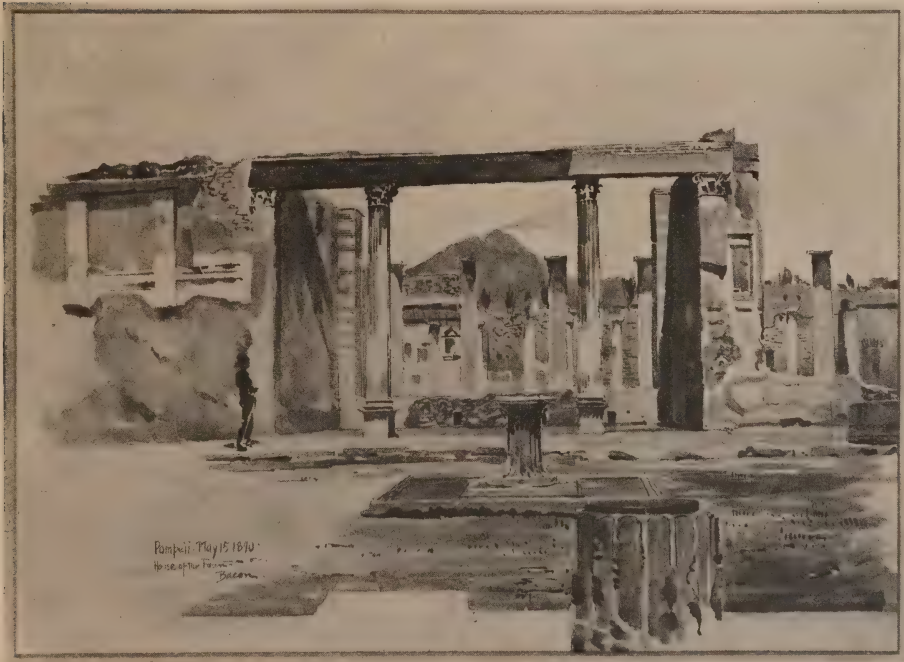


"A"
Mosaic Fountain - Pompeii —
about 8' 0" high -
The red dots are where the shells have dropped off leaving the colored cement
Plan at "A"
H. Bacon May 19 '90 -

Mosaic Fountain at Pompeii. Water Color Sketch by Henry Bacon. (1890)



Water Color Sketch Made at Brindisi by Henry Bacon (1890).



Water Color Sketch Made at Pompeii by Henry Bacon. (1890)

tion of himself, of his utter singleness of purpose and his sincerity.

"True, devoted student of that great art of Greece that he so deeply loved, he came to know it as only the lover can know. Unfaltering in his fidelity, his long striving was not for what so many seek: bigness and loud acclaim and the driving bustle of the market place, but ever to capture and make to live again the exquisiteness of the most perfect moment of man's past. Let us all now be glad that the fine crown of his career was bestowed upon him by his own brethren, as they charged him with the task of serving his country by commemorating its great hero.

"We may hold what views we like about the forms of our art; we can have but one as to the nobility of him who is gone away from us and of whom we shall with pride tell our sons. Grief is with us, and sympathy for the afflicted, but above the grief is thankfulness for what he was.

"Resolved that this minute be filed in the Chapter and Institute records and that a copy be sent to the family of our revered and beloved friend."

From an article in the *New York Times* we quote the following:

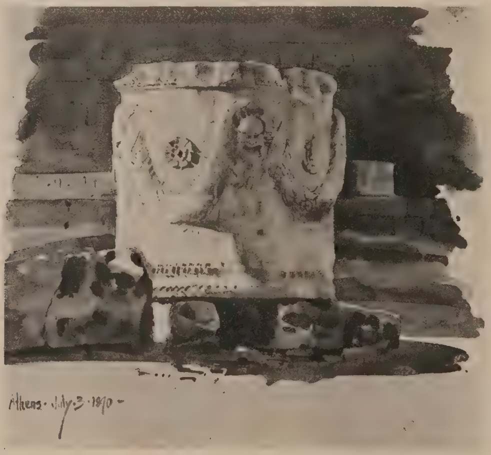
"If Henry Bacon had died before he had dreamed and designed his great masterpiece, the Lincoln Memorial in Washington, his countrytmen could not have known what reason they had to mourn his death. As it is, his later "going to the stars," which seems all too early to those who have known the remarkable charm of his personality, the joy of his always cheerful comradeship and the genuine worth of the man, gives new occasion to the whole nation, to whom he brought his supreme gift, for renewed expression of gratitude for his lengthened life. He has left many beautiful things of his designing by which his skill will be remembered in parts of the earth where his name is not known, or where it will be forgotten. But the greatest of all that he wrought, which stands in Doric simplicity of tribute to the great soul of Lincoln, is also his own lasting monument."

"The most perfect tribute that stone can pay in classical lines to a mortal who has put on immortality, it also testifies to the pure and exalted patriotism, as well as artistic genius, of him who brought it into being. Henry Bacon served not only his own day and generation but also generations to come by his imperishable art given in the full measure of his high devotion to an 'enduring man.' "

From an article in *The New York Tribune* is taken the following extract:

"When a great artist dies he takes from us the embodiment of an idea. He is the representative of a principle, a style, an individualized vision of beauty. Such a type was Henry Bacon. As a man he was modesty itself, gentle, generous, all sunny kindness to his friends. As an artist he stood for the severity of the Greeks and figured in his profession as the most consummate exemplar of the grand style we have ever had. This fact, which is confirmed by a large number of buildings designed by him, is made most triumphantly manifest in the Lincoln Memorial at Washington. Bacon's genius reached its culminating point in that famous temple. There he exposed in its noblest estate his idea, his style, his vision of beauty * * *."

"It was his privilege to commemorate Abraham Lincoln, and it was that, not merely the fulfillment of an architectural obligation that engaged his very soul. Bacon was every inch a man, ardent upon political honesty, steadfast and invincibly square in all the relations of life, impeccable in the performance of duty, clean and sweet and strong, a friend whose death brings inexpressible sorrow to those who loved him. All these rich traits were poured as in a golden flood into the work that he did as an architect. The only comfort that we have in bidding him farewell is that he leaves behind him a shining and deathless mark.' "



Water Color Sketch Made at Athens by Henry Bacon (1890).

MASTER DRAFTSMEN, PART II

JULES GUERIN

ONE has but to mention the first name anywhere in present day art circles, and the rest is understood — as with "John D." and "Henry." The two latter are so well known as the result of being, each, alleged to be "worth a billion dollars." Jules may not have as much money as John D. or Henry (I don't know!) but he has what is probably the largest and finest studio of any artist in existence, or in history, and it is located on the roof of a high building at the corner of East Twenty-third Street and Fourth Avenue, New York. It is high and long enough to take the biggest canvas ever made. Which makes it clear that he had big work to do when he built it, and confidence that more big work would be required.

Now, in sundry places, Cairo, Illinois and Egypt, and London, England and Ontario, for example, Jules is known so well because, during so many years, whenever he needed a rest from real work he put in his spare time (and he must have had a lot of it!), producing colorful compositions to illuminate the dark pages of dull stories always to be found in magazines which achieve international circulation. Some of us used to buy those magazines. Never read them! Just tore out Guerin's illustrations to keep, and threw the rest of the magazine in the waste basket. Everybody who used to collect the small prints of his drawings, which formed the "full-page illustrations in color," of the magazines of a quarter of a century or so ago will recall his two or three drawings which appeared in *Scribner's* and told the whole story to the title of "The Kind of Stuff that Dreams are Made Of." They showed "dramatic art" from several points of view; including both from before and behind the scenes, at the same time, as seen from the fly-gallery (on the side of the stage-wall about twenty feet above stage level). The pictures were very simple in drawing and color but never before was so much shown with so little apparent work! One of them showed a chorus of girls in ballet skirts beating tambourines and sitting on top of a stage "wall"—of scenery canvas. Behind each was a step ladder, supported by a stage hand. These were within a shadow cast by the rays from the flood lights in the fly-galleries striking upon the "wall," or backdrop. The darkened auditorium of a large theatre filled with people, with the orchestra playing in front of them, appears through the screen of light thrown aloft the stage by the foot-lights. It is all shown with so few lines, and just a few, almost flat (but graded) washes of red, gray and yellow. Anybody with an eye to the extraordinary in simplicity would note and save those illustrations.

Jules Guerin.

Then he followed up with scores of pictures and drawings of the water-front and buildings of New York and other cities — especially his masterly presentation of the Obelisk at Washington—and Chateaux of France; temples of Egypt; mosques and bazaars of Constantinople, etc. Dozens of the most remarkable renderings of American architectural designs; and then by mural decorations of a most individual quality — possessing the characteristics of his illustrations in beauty of color, line and composition. They have a way of giving perspective, and great stretches of it, without in any way removing the effect of the structural strength of the wall—a quality also found in the decorations of Puvis de Chavannes which caused architects to regard his work so highly. Mr. Guerin's work in the Pennsylvania Station, New York, is so successfully conceived in that respect that one may pass through the big waiting room many times without being especially aware that it is decorated with paintings. It is only when one stands in the room some minutes that he becomes conscious of the big decorative panels of perspective maps; and the first impression is that

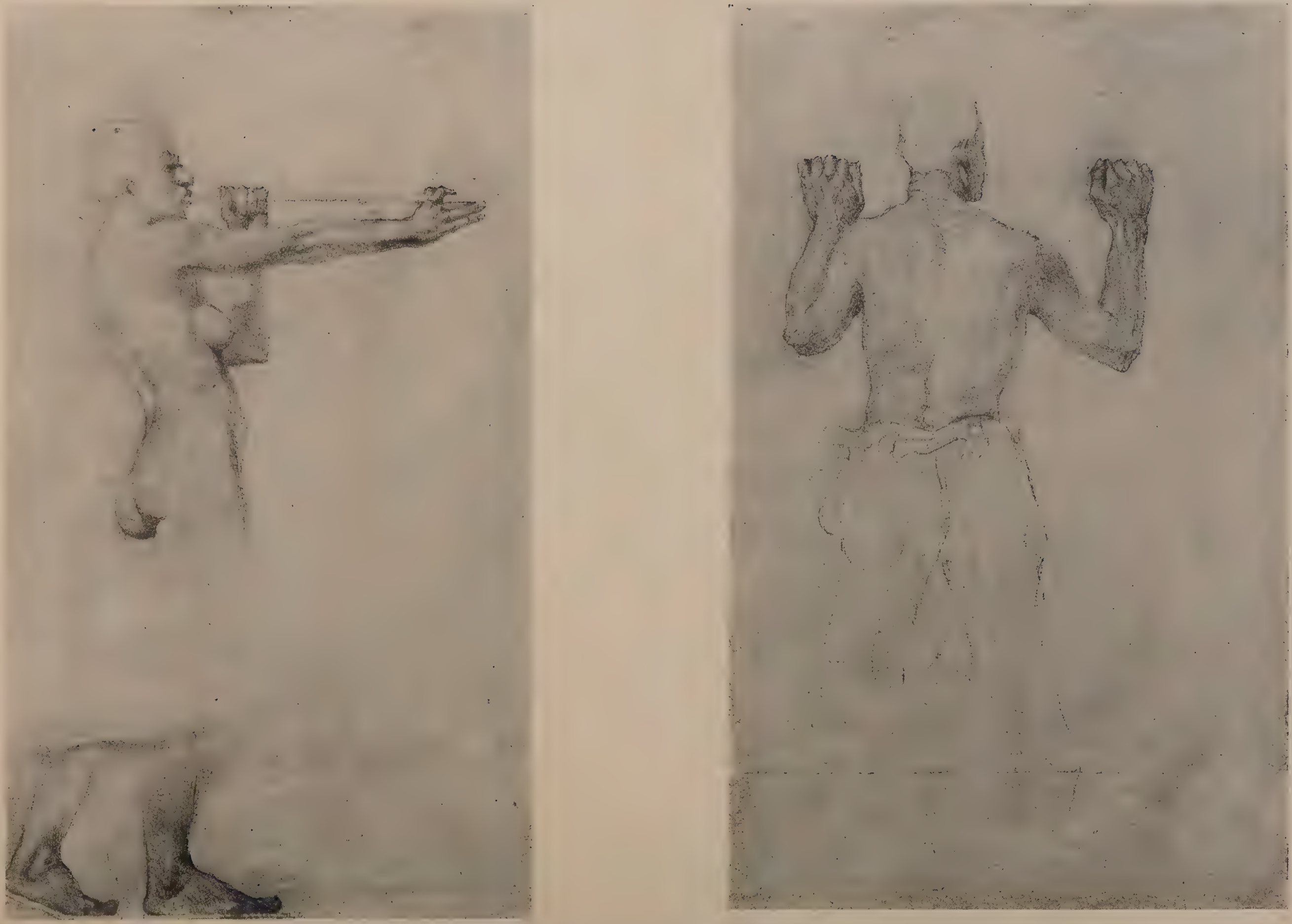
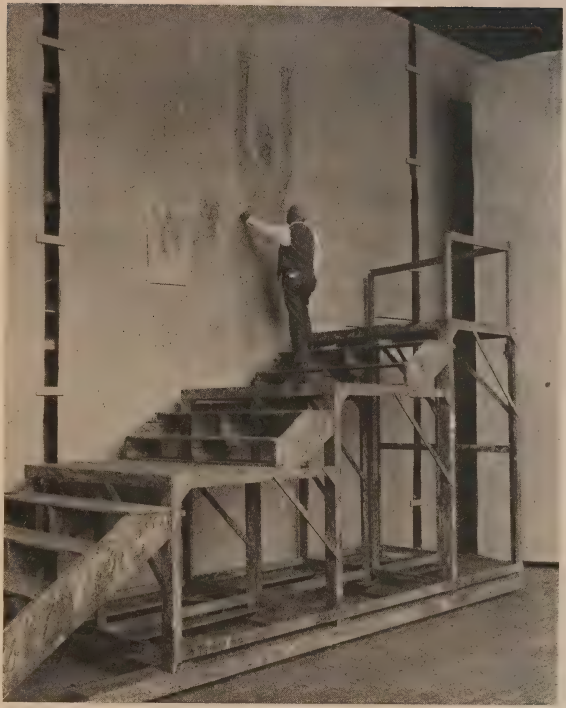


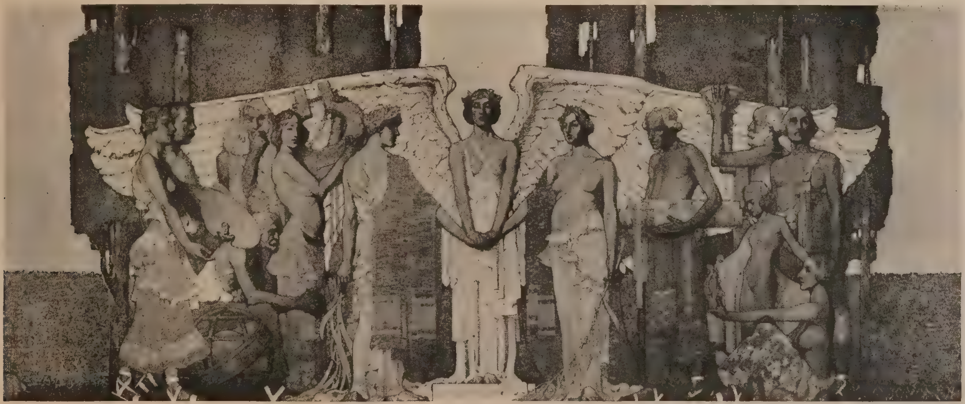
Figure Studies by Jules Guerin for his Mural Decorations in the Lincoln Memorial, Washington, D. C.

they are bas-reliefs. Then one notes the greyed color scheme which blends into the stonework and becomes part of the architecture. Each of the six panels is 25 feet high and 70 feet long. It is all very successful and monumental in being so unobtrusive, so completely drawn — and drawn with so few lines, and those with comprehension of the part they will play in the effect of architectural design. That is something rarely understood by the decorative painter. Most of the finely painted rooms of Europe contain panels where some lump of human flesh seems to protrude from the wall surface; or some deep dark shadow seems to break a misshapen hole in it. There is nothing of that in the way Guerin handles a decoration for he sees the whole room with the eye of an architect—an artist capable of being an architect, at least; and one whose collaboration has been invited without fear of any of the unfortunate things that have occasionally happened to architects at the hands of "artists"—for example, when Whistler ruined an architect's design for a room by "painting it out" with absolutely no consideration for the feelings of the architect. Mr. Guerin has had an experience in the application of color to architecture that is unique. As Director of Color of the Panama-Pacific Exposition, he studied the color treatment of the exposition as a whole, and the effect of each part as a whole and in detail. It had to be considered in the effect it would produce as seen from the ferries in San Francisco Bay at a distance of a few miles; and as seen from the heights of the Presidio a mile or so away; as well as from intermediate distances and the close-up view of the visitor within the gates. It also had to be considered with regard to the effect that would be produced under the then novel experiment of flood lighting by projector lamps. It is unnecessary to repeat here with what great success Guerin handled the vast undertaking. In the memory of many visitors to the San Francisco Exposition the outstanding impressions will remain the color and the gardens. The impetus given to both by the Exposition is shown by the adoption of exterior coloring of houses all along the Coast—no gardens

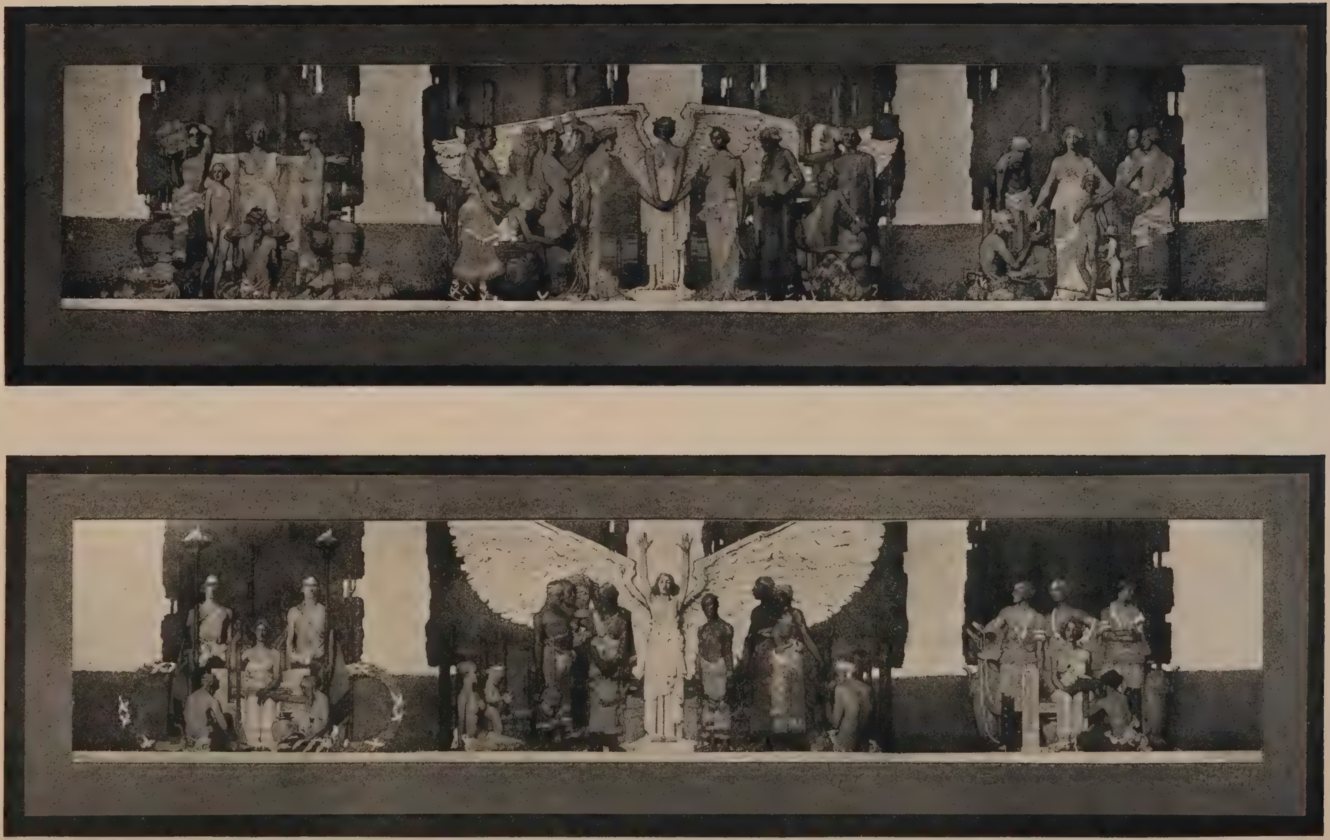
(*Continued on page* 70)



Jules Guerin in his Studio.



Detail of one of Jules Guerin's Decorations in the Lincoln Memorial.

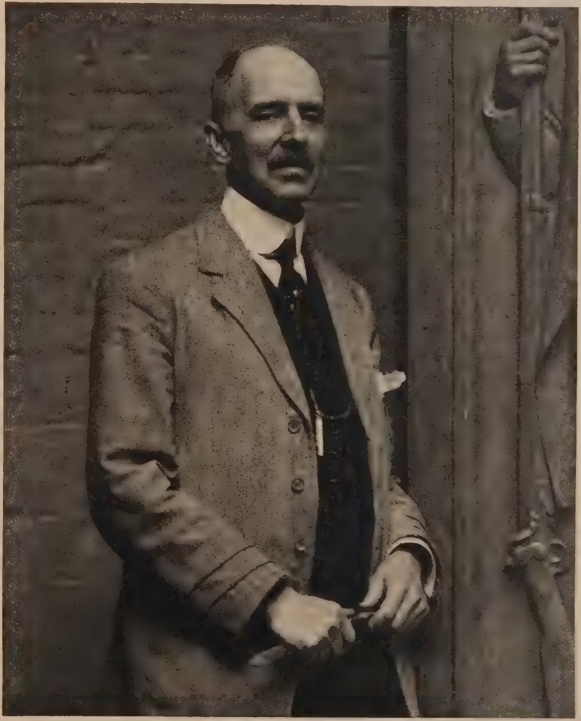


Portions of Jules Guerin's Great Mural Decorations in the Lincoln Memorial, Washington, D. C.

DANIEL CHESTER FRENCH

THE SCULPTOR OF THE NATIONAL MONUMENT TO LINCOLN

ARCHITECTS usually regard sculpture as "part of the detail" of a building. From the points of view of other observers it may be said that the architecture is often for the useful purpose of sheltering a great piece of sculpture, and that the scultpure is the essential work of art and the architecture somewhat subservient—much as the economical construction of a building is subservient to the architectural design. One or the other views may be in any given instance the more generally accepted and mainly correct; but in some cases—the Parthenon, for instance — each has such an important part to play that collaboration — united work by the architect and sculptor — each on a part that takes into full consideration the thought and study of the other and with a full recognition of the importance of the other's work to his own — is the only conceivable way of accomplishing the result aimed at: a complete indivisibile work of art. It should, nearly always, be the method in a great memorial and usually in the smaller monument, although in the latter it is often essential that it should be mainly sculpture, or mainly architecture.



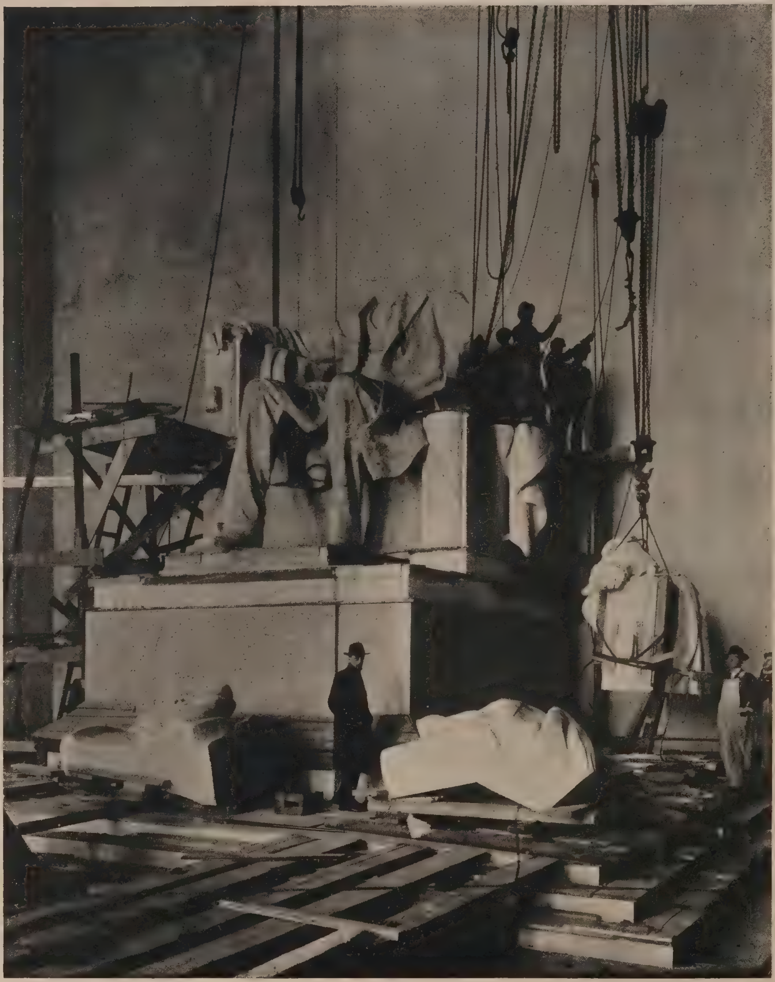
Daniel Chester French.

Collaboration between architects and sculptors is not unusual; but when it extends to many works, and over a period of years, as with Pierre Lescot and Jean Goujon; Stanford White and Augustus Saint-Gaudens; or with Henry Bacon and Daniel C. French, it is, at least, notable and the work of the individual becomes almost inseparable from that of the other.

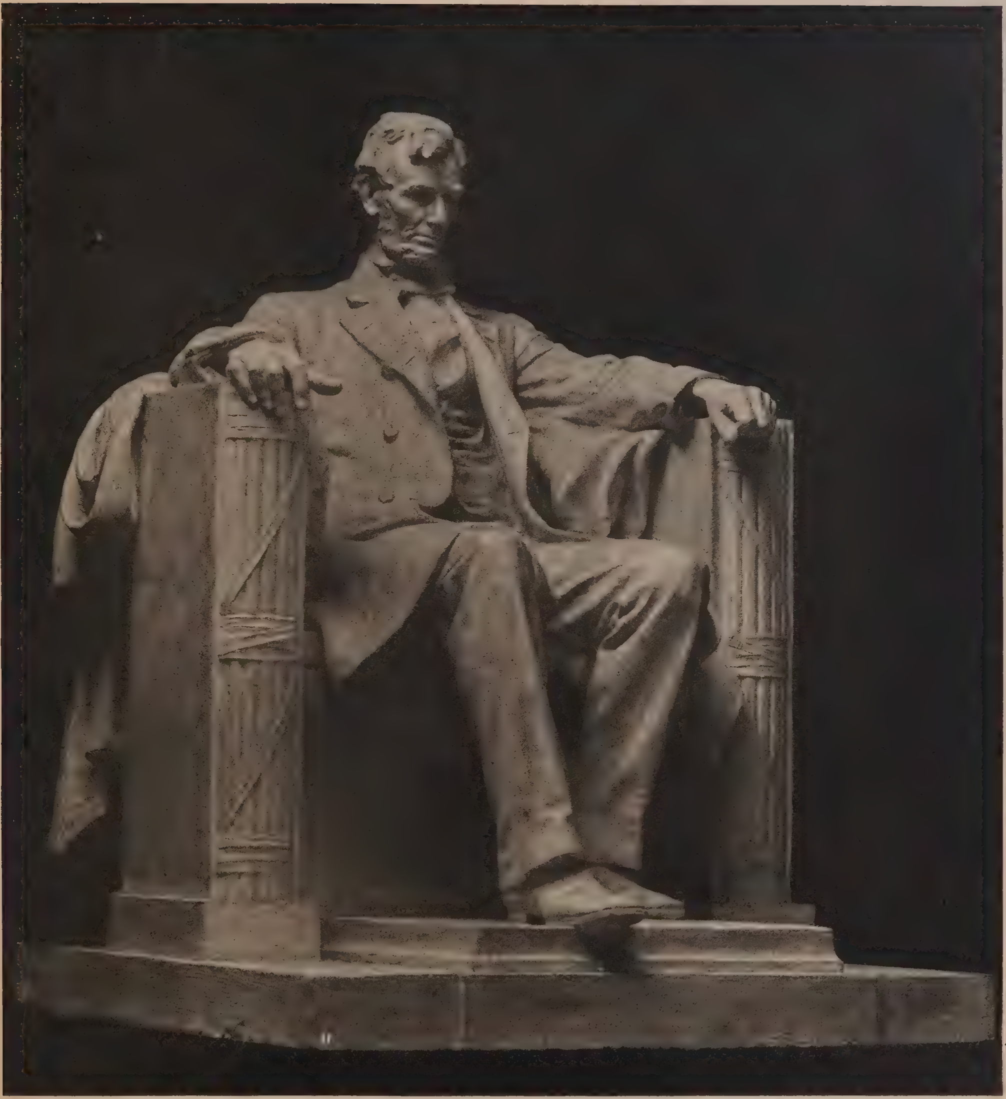
The two last mentioned artists have collaborated upon the designs of more than fifty important monuments. An *important* monument is one that is worth the thoughtful regard and study of an enlightened human being; and one that will repay him in pleasure for the time he devotes to it. Most of the monuments are also of a sufficiently fine and large type as to be costly and, therefore, considered "important" even by people of no particular intelligence.

Chief among them from the point of view of both well-enlightened, and not so well enlightened people, is, of course, the great Lincoln Memorial at Washington; but among the others are the Spencer Trask Memorial at Saratoga Springs, N. Y.; DuPont Fountain at Washington, D. C.; Republic Monument and Marshall Field Monument at Chicago; Lincoln Monument, Lincoln, Nebraska; Lafayette Monument, Brooklyn; Oglethorp Monument, Savannah, Ga.; and the monuments in Massachusetts, to Parkman at Jamaica Plain; Longfellow at Cambridge; Melvin at Concord, and Draper at Milford —which would constitute of themselves a fair start for a modern Appian Way. The sculptured figure of the Lincoln Monument in his namesake city in Nebraska, is a fine, distinguished standing statue—one that might well have caused repetition at Washington and tempted both French and Bacon to consider an open or peristyle monument at the National Capitol. But they felt that it should be "primarily restful," and a terminal point rather than "an incident on the way" to somewhere else. Surely, logical decisions! The seated Lincoln is very monumental and much at ease. Also, it is very large—a point not immediately realized when first observed.

"I made the seated figure twelve feet high at first, cast it in plaster and set it up. Pshaw! It was



The Colossal Statue in the Lincoln Memorial, Washington, in Process of Erection.



Working Model by Daniel Chester French for Statue of Lincoln in the Lincoln Memorial, Washington, D. C.

lost! It seemed very little, Mr. French remarked. "Then we had photographs taken of the interior and statue together and we drew on the photograph a figure that is nineteen feet high, seated, or about twenty-five, standing—and found that to be right."

Probably nobody who has studied or seen the executed works of Mr. French will be disposed to deny the just sense of scale to be found between the figure and pedestal—or figure and building. We merely observe that it is right—therefore, no need of comment!

But the fact is that Mr. French would be an important architect—one who would produce good architecture, if he were not an important sculptor—one who produces good sculpture. In discussing Fifth Avenue the other day he said, "A straight road is always a long road. Fifth Avenue lacks incidents; there is nothing between, say 34th Street and Washington Square to attract attention to a point at one side or the other and seem to shorten the distance. "If we only had a good plan of New York there is enough good architecture in it to make it one of the most beautiful cities in the world," he continued.

Speaking of the end of Fifth Avenue, our talk drifted into the end of Pennsylvania Avenue, Washington, and the White House. I thought it might be interesting to know what the attitude was there with regard to architecture and monuments. Mr. French spoke of President Roosevelt's desire to improve Washington and his attempt to appoint an art commission "off his own bat" and of the bombast from Congress which followed to demonstrate that Roosevelt's act was illegal, and enable them to set it aside. "I have frequent altercations with my friends at the other end of the Avenue. I don't always like it very much; but I flatter myself that they like it less," was the way "Teddy" explained the situation to Mr. French, who was, by the way, one of the members of the first Art Commission, appointed by President Roosevelt, and also of the Commission established under President Taft. Few of the old friends of this active artist and modest, unassuming man, realize that half a century ago—in the spring of 1874—he was commissioned to produce his bronze statue "The Minute Man," unveiled the following year, at Concord, Mass.,—the beginning of his fame. His colossal statue of The Republic, one of the striking ornaments of the Court of Honor of the Columbian Exposition, or "World's Fair," at Chicago, was reproduced at a smaller scale (25 feet high) and stands on the site of the exhibition's Administration Building, in Jackson Park. His memorable relief of "Death and the Sculptor"; and his John Boyle O'Reilly Memorial, designed in collaboration with Mr. C. Howard Walker, Architect, are what he might describe as "incidents"—incidents in the brilliant highway he has kept to through the fifty years of art work that everybody knows.

F. S. S.

JULES GUERIN.

(*Continued from Page* 65)

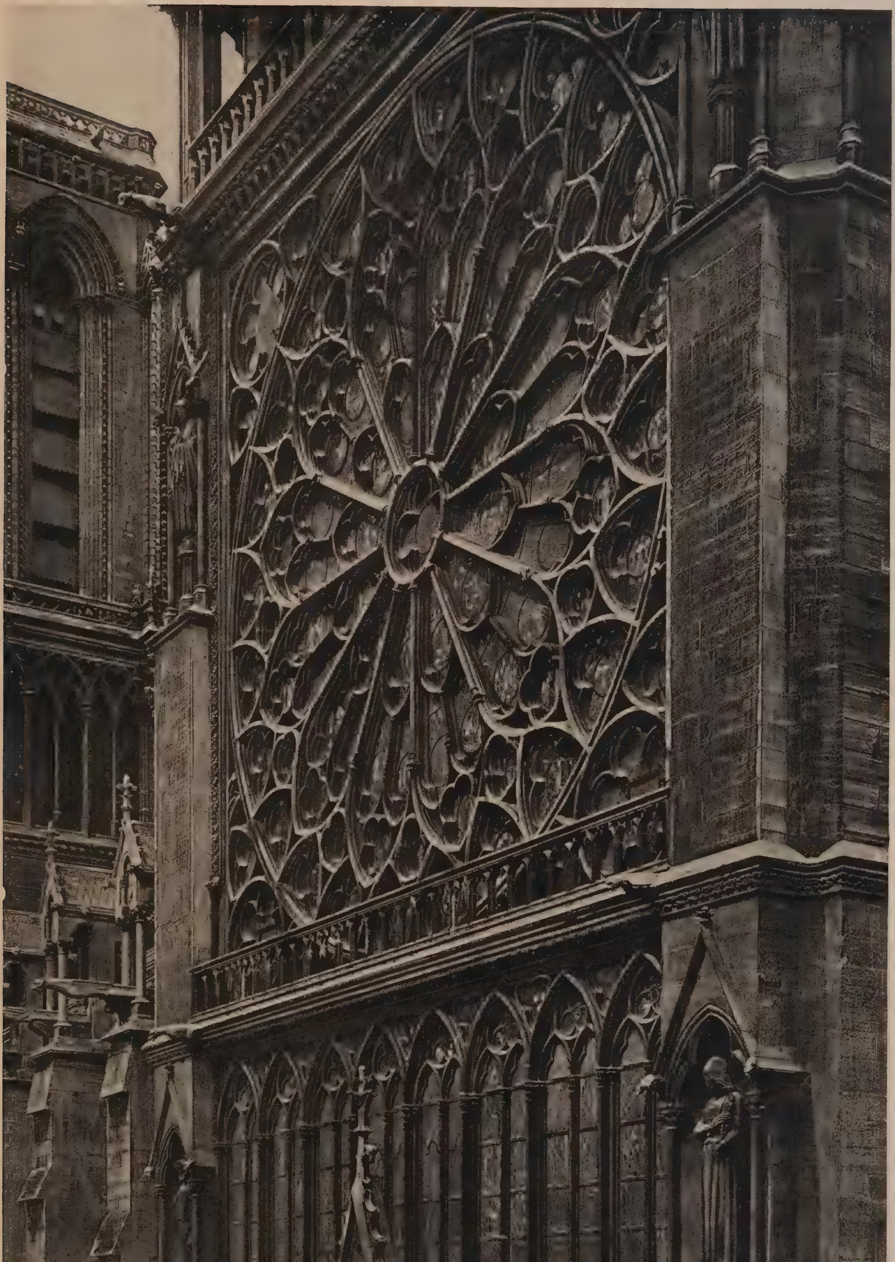
ever showed to better advantage than against these colored walls.

Henry Bacon designed the Court of the Four Seasons (why four—at San Francisco, I wonder?) at the Exposition and Jules Guerin designed the color treatment. The building had been designed for color treatment in a broad manner, and the designer of the color began where the designer of the form and proportions left off. The harmony of work was excellent. There was almost no detail. The result was most monumental—a fine study fit for something more permanent than an exposition court. Bacon must have felt that too; and that Guerin should be his collaborator on the Lincoln Monument was to be expected following the demonstration of the latter's prowess at San Francisco. His decorations of the Lincoln Memorial are fully up to expectations and hopes. They have been designed with a judgment of effect from the distances at which they will be seen, that is born of attentive observation and a great deal of experience. Not the least important thing about them is their relation in size and scale with Mr. French's great marble statue of Lincoln. To the latter they concede the pre-eminence due in the internal effect, but they add the touch of color—the human touch, so to speak—that assures the beholder that the whole is a living testimonial to a *great* man; and relieves any apprehension that might be of the great mausoleum of "a dead man." It is a monument to the Great Spirit that *lives*—in the real American people.

The character and dignity and simplicity which have marked Mr. Guerin's work from its commencement continue today; but the work is not only different in subject but better—always *better*—each year. The past year or more he has spent upon his very large, and fine decorative paintings for the interior of a bank at Cleveland, O., and now he has another one to do.

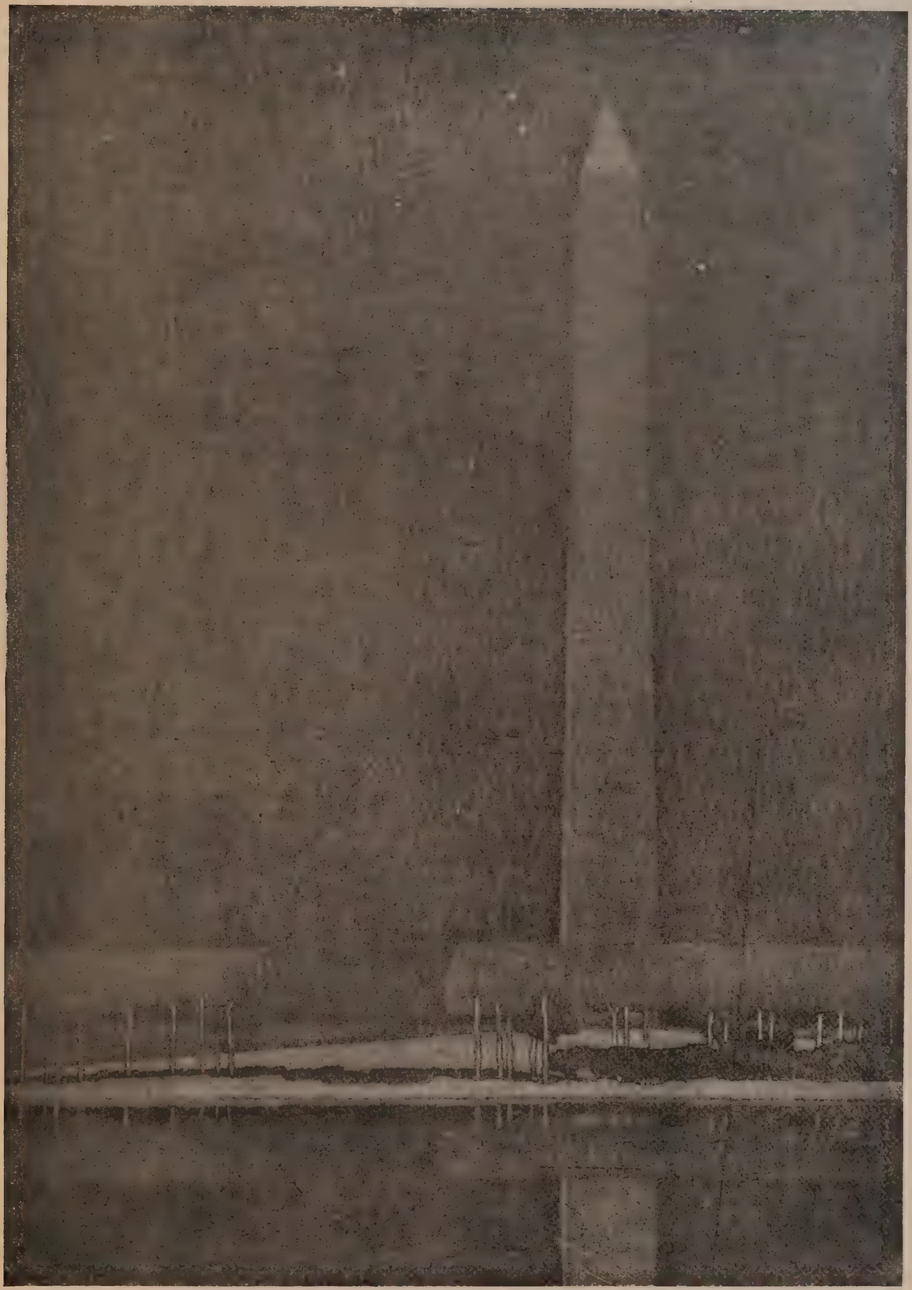
So much work produced has meant of course so much hard labor and call upon the artist's physical energy. Jules Guerin is always at work—at least a good, long day of it, every day, except in the summer, when he goes "to take a rest for a couple of weeks"—among the mosquitos of New Jersey!—and comes back with as much work done as if he had stayed in New York. He gets his rest by change of work, and does not seem to require any other rest. At the Players' Club, where he usually lunches, he seems to be as well known as in Oxford, Keokuk, Paris and Tia Juana—for everybody there too, calls him by his first name. His wit to his friends is like his pictures—a thing of beauty and a joy forever, and served up regularly with lunch. For example, he sits down with two friends—one doing all the talking. "The shad is fine, Billy," he says to the talkative one, "have some!"

F. S. S.



CATHEDRAL OF PARIS. ROSE WINDOW OF THE SOUTH TRANSEPT

On the other side of this sheet is shown an unusual photograph of the rose window of south transept of the Cathedral of Paris reproduced from a plate in "Selected Monuments of French Gothic Architecture;" now being brought out by the publishers of PENCIL POINTS. *This work consists of a selection of one hundred plates from the archives of the French Government Commission of Historic Monuments.*



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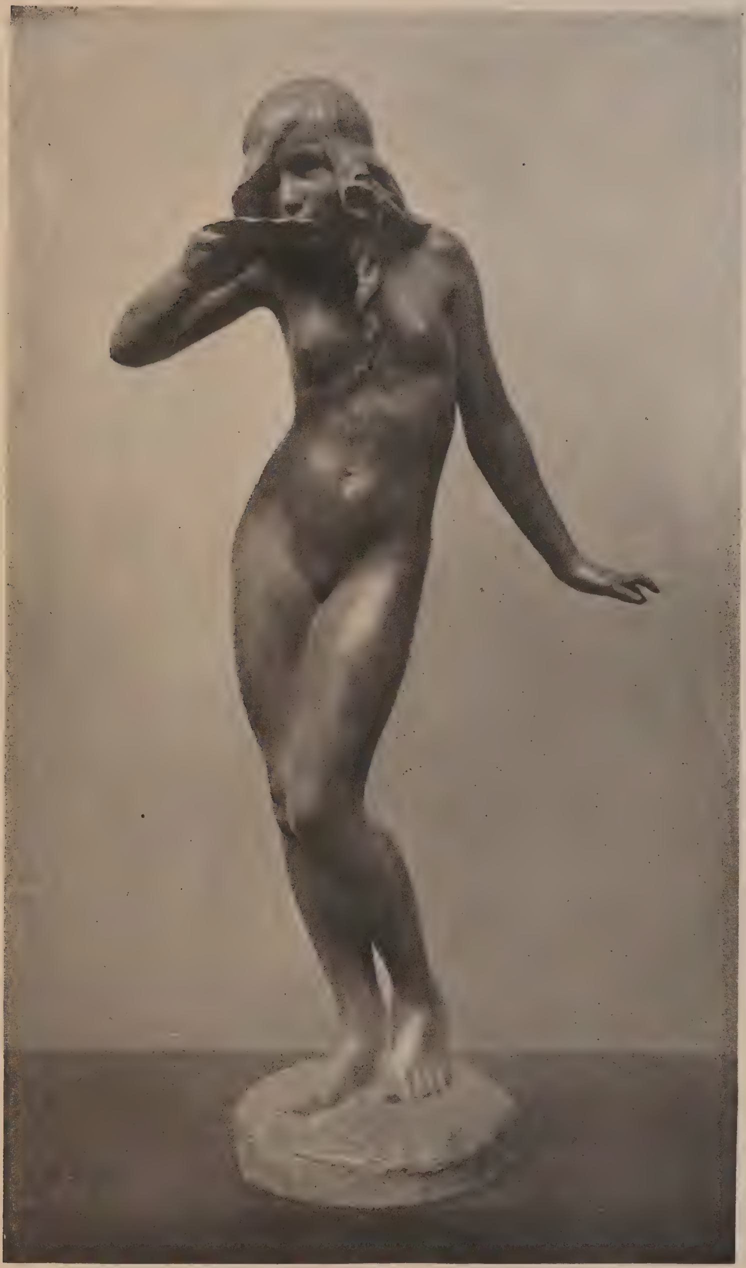
THE WASHINGTON MONUMENT.

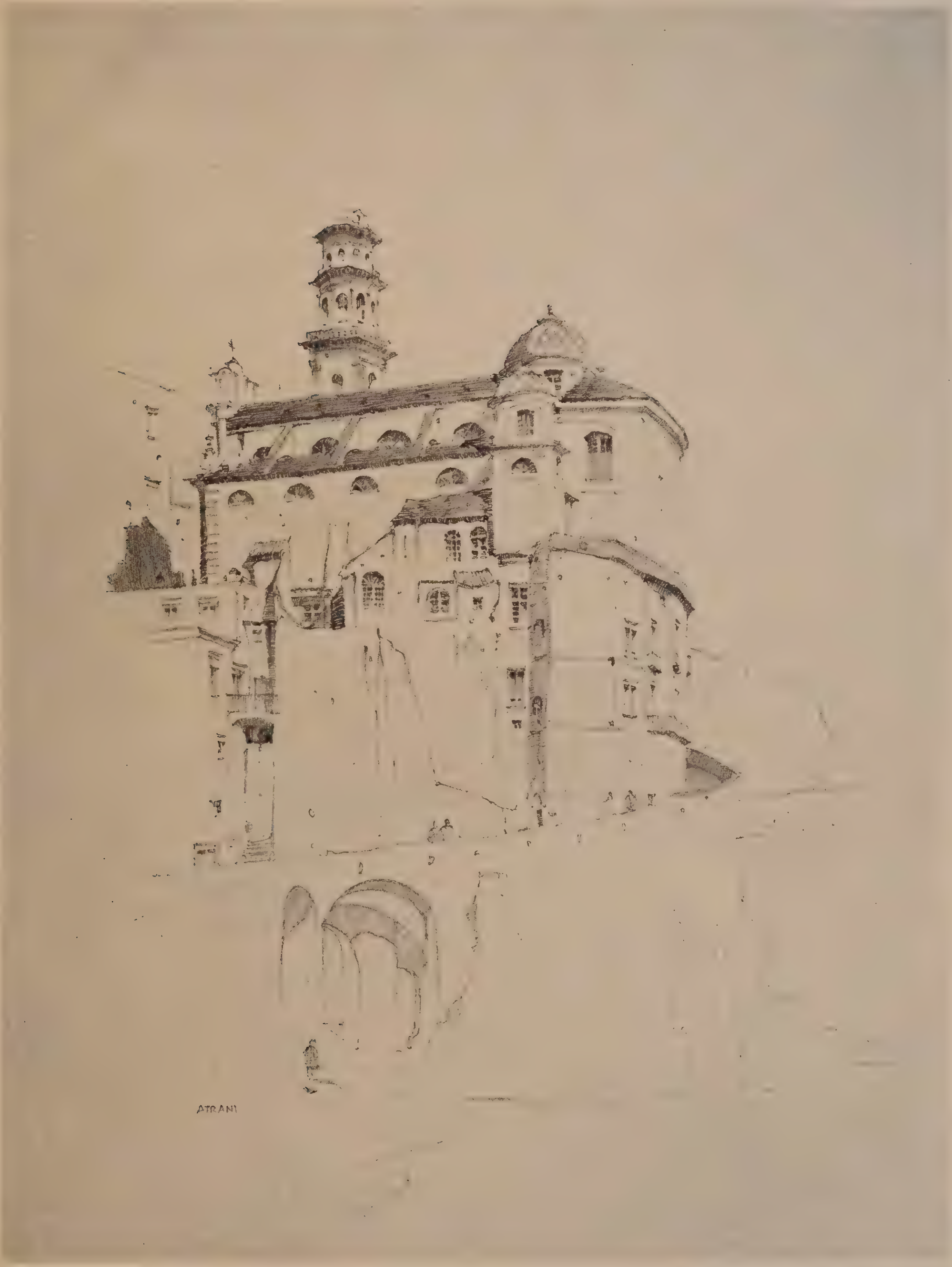
"A Hoary Sentinel at the City's Water Gate." From a Drawing by Jules Guerin Illustrating "Washington, A City of Pictures," in Scribner's Magazine, February, 1902.

One of Jules Guerin's magazine illustrations referred to in the text of the article on that artist in this issue is shown on the other side of this page. It was printed in color in Scribner's, in quiet, greenish tones of gray, which it is impossible to render in a black and white reproduction, though much of the atmospheric quality has been retained in our reproduction—the effect of being enveloped in a haze.



GARDEN STATUE BY EDWARD McCARTAN
"GIRL DRINKING"

A garden statue of unusual beauty is the "Girl Drinking" by Edward McCartan, of which a photograph is shown on the opposite side of this sheet. This statue, like Mr. McCartan's other works, shows a remarkable artistic sensitiveness as well as a mastery of technique on the part of the sculptor.



SKETCH BY SAMUEL CHAMBERLAIN AT ATRANI, ITALY

Mr. Samuel Chamberlain recently wrote us from Paris and sent us a sketch he had just made in Italy. It is reproduced on the other side of this sheet. It is an admirable example of the style of this artist's work with which the readers of Pencil Points *are already well acquainted.*

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THE AMERICAN ACADEMY IN ROME.

FROM a letter recently received by C. Grant La Farge, Secretary of the American Academy in Rome, from Frank P. Fairbanks, Professor in Charge, School of Fine Arts, we quote the following items:

"Victor L. S. Haffner, senior architect, has returned from a short trip to Southern Italy and is now occupied on his study of the existing approach to St. Peter's.

"Frank Schwarz, senior painter, is completing his figure composition and superintending the execution of the frame for his canvas. The frame is being executed at the Academy where its development is serving as a demonstration of the use and application of pastiglia.

"Edmond Amateis, senior sculptor, has assembled his 'Madonna and Child,' a relief in marble with an architectural setting in wood, designed after the manner of the Renaissance. He has several sketches for figure groups under way. A bust and a relief are being cut in marble. He is making a terra cotta copy of his figure called "Mother Earth."

"Henri Marceau, second year architect, is travelling in Sicily, and Alfred Floegel, second year painter is carrying forward a panel in gesso and mosaic. He has a large composition that he is about to execute in fresco on plaster, using a tile unit about eight inches square in order to make the decoration transportable.

"Lawrence Stevens, second year sculptor, is working on a single figure of a standing girl. He has evolved a scheme of a youth and sea horses for his group requirement and has just completed an interesting half length portrait of a young woman.

"Norman T. Newton, landscape architect, has completed his plan of the layout of the Villa Chigi and is well advanced with two sections of the Villa.

"We omitted in last month's letter to mention Newton's activities in relation to the collaborative competition. We wish to correct the impression that may have arisen that he did not participate in this important activity. On the contrary he was required to solve in collaboration two of the problems (the third scheme had no provision for landscaping) and he rendered the plan for the garden layout for one of the teams.

"Arthur Deam, first year architect, has also returned from a few weeks' travel in the south and is completing the perspective of his restoration of the Temple of Fortune.

"Francis Bradford, first year painter, has been occupied with painting, sketching and sight-seeing. He has commenced a frieze composition of figures, and is now traveling before going to Florence to begin his first year copy of the Galleria San Marco in Florence.

"Alvin Meyer, first year sculptor, who has likewise returned from travelling, is carrying forward several works, among which is his required figure for the 1st year, called the "First Born."

"Albert Clay, visiting student, on a scholarship from Yale University, has just completed a group of five drawings showing the most recent reconstruction of the Neronian Sacra Via. These drawings, made in co-operation with Miss Van Deman, include a plan of the site as it exists, a restored plan, a section and elevation of the Neronian Porticus.

"Another drawing of a bay of the Porticus shows the location of the existing fragments as applied to his restoration."

OVER THE DRAWING BOARD.

THE descriptions of the ways of doing drafting room work and of short cuts that save time and labor embodied in *"Over the Drawing Board"* by Ben J. Lubschez, A.I.A., have created so constant and strong a demand for that book that its republication has been warranted and the recent publication of a second edition affords an opportunity for those who do not already possess a copy to secure this extremely useful book. It is a compact book and down to brass tacks all the way through. It provides clear instructive directions for doing well many of the things that have to be done either regularly or occasionally in the course of drafting room work and it is so arranged that the desired information can be found readily and so written that it can be applied with certainty. It lives up admirably to its subtitle "A Draftsman's Hand Book." Mr. Lubschez, it will be recalled, is the author of a widely used work on perspective. He is a Fellow of the American Institute of Architects. Price $2.00. Published by the Press of the American Institute of Architects, 250 West 57th St., New York.

TRAVEL COURSE UNDER PROFESSOR PHELPS

AS IN 1923 Professor Albert C. Phelps, of the College of Architecture at Cornell University, will act as leader of a group of architectural students during a trip in Europe this summer. The Architectural Course under Professor Phelps will be one of four overlapping courses which are planned for students of painting, of landscape architecture, and of history, respectively. The Architecture Section, while not excluding objects of outstanding interest outside of the architectural field, will emphasize the study of important buildings and decorative compositions, the examination of drawings and models by the world's greatest designers, etc., and will give opportunity to photograph and sketch details of architecture and decoration. The tours are planned at a minimum cost to students by The Institute of International Education, 522 Fifth Avenue, New York. Details of the trip may be obtained from Irwin Smith, Director, Times Building, New York.

THE CHICAGO ARCHITECTURAL CLUB.

THE Foreign Travelling Scholarship closed March 31st. The program called for the design of a Memorial Reading Room in a State Capitol. The room was to be a memorial to those who lost their lives in the Great War. The men who submitted solutions were Edwin Anderson Conners, Dando, Allan Erickson, Eiseman, Lindbald, Mincus, George Nedved and Edwin Ryan. The jury of award was made up of Messrs. Mundy, Adler, Holabird, Hubert Burnham and Beersman. Mr. Eiseman was awarded the prize, Mr. Ryan was placed second and Mr. Conners was placed third. Mr. Eiseman will leave on his trip around the first of August. The drawings will be exhibited at the June meeting of the Chicago Chapter of the A.I.A. Harry Beig submitted drawings for the second preliminary of the Paris Prize. He was placed in the judgment which makes him eligible for the finals. The Club wishes him the best of everything and expects him to bring the prize to Chicago.

GEORGE MAQUOLO.

GEORGE MAQUOLO, two of whose sketches are reproduced in this issue, was born and educated in St. Louis, Mo. He attended the St. Louis School of Fine Arts where he received a bronze medal at the age of fourteen. In 1913 Mr. Maquolo entered the Architectural School of Washington University and in 1917 he was awarded the graduate scholarship and appointed student assistant. He enlisted with the 419th Engineers detailed to the 7th French Army; contracted pleurisy and after four months in the hospital entered the A. E. F. Art Centre, Bellevue, France. Upon his return to the United States he was granted an award of vocational training and later, through the recommendations of Mr. Lloyd Warren and Mr. Gabriel Ferrand he was sent abroad for a year. He pursued the first year's work at the Ecole des Beaux Arts and spent five months travelling in Italy. Mr. Maquolo has been in the offices of Mauran, Russell & Crowell, T. P. Barnett Co., and Ferrand & Fitch. He recently won the Fry Prize, St. Louis Artists' Guild, for black and white. Mr. Maquolo feels that he owes much to M. Gromort and to Mr. Carlu of the A. E. F. School at Bellevue, and to Mr. Ferrand of Washington University.

ST. LOUIS ARCHITECTURAL CLUB ELECTS OFFICERS

At the annual election held at the St. Louis Architectural Club on April 3rd, the following officers were elected for the ensuing year:

President, John A. Bryan,
First Vice-President, Walter Wawrzyniak,
Second Vice-President, Herbert Reinhardt,
Secretary, Daniel Carroll,
Treasurer, Clarke Sanford,
Members of Executive Board, Carl J. Trebus and Herman Frauenfelder.
Trustee, Louis LaBeaume.

ARCHITECTURAL COMPOSITION.

A BOOK of great value in the study of architecture is *Architectural Composition*, by Nathaniel Cortlandt Curtis, A.I.A. This book directs the attention primarily to the plan of the building and of the development of all else from the plan, in accordance with a principle long accepted in the teaching of architecture. On this sound basis the author has built up a most interesting and helpful treatment of his subject and has presented the matter in interesting and readable text with numerous illustrations that make clear and enforce the points brought out. It is a comprehensive book embracing the essentials and treating them with sufficient fullness for its purpose as a guide in the study of architecture on the part of the student. There are in all 280 pages and 270 illustrations with a double page folding plate reproduction of Piranesi's Campus Martius, Rome. The author is Professor of Architecture and Head of the School of Architecture in the Tulane University of Louisiana; formerly, Associate Professor of Architectral Design in the University of Illinois; Professor of Architecture in the Alabama Polytechnic Institute. Price $6.00. Published by J. H. Jansen, Cleveland, O.

FOR THE ATTENTION OF SPECIFICATION WRITERS

WE DESIRE to complete our office list of Specification Writers. We do not refer to architects who prepare their own Specifications, but to those who are employed by architects and engineers to do this important work. We already have on file the names of many who have sent in cards for our Drafting room registry, but feel that as yet our list is not complete. So if you are a Specification Writer, as defined above, and have not yet sent in your name, please do so.

PERSONALS

Meyer J. Strum, Architect, has removed his offices to 708 Church Street, Evanston, Ill.

Walter Kough, Architect, has removed his offices to Room 29, Shoemaker Bldg., Greensburg, Pa.

Ernest H. Fougner, Architect, has removed his offices to 197 Market Street, Newark, N. J.

Pond and Pond, Architects, have removed their offices to the Tower Building, 6 N. Michigan Avenue, Chicago.

Raymond Hood, Architect, has removed his office to the American Radiator Building, 40 West 40th Street, New York.

H. M. Haven & A. T. Hopkins, Inc., Engineers and Architects, have removed their offices to 11 Beacon Street, Boston, Mass.

David R. Williams, Architect, has opened an office at 1115 Southwestern Life Building, Dallas, Texas.

Childs & Smith, Archltects, have removed their offices to 720 N. Michigan Avenue, Chicago, Ill.

Dean & Dean, Architects, have removed their offices to Room 1406, California State Life Building, Sacramento, Calif.

John Russell Pope, Architect, has removed his offices to 542 Fifth Avenue, New York.

Harwood Hewitt, Architect, has removed his offices to 515 M. Harris Bldg., Los Angeles, Cal.

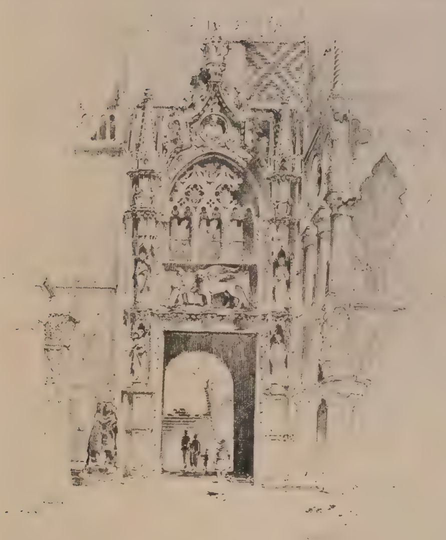
Carlton Strong, Architect, has removed his office to the Keystone Bldg., 324 Fourth Avenue, Pittsburgh, Pa.

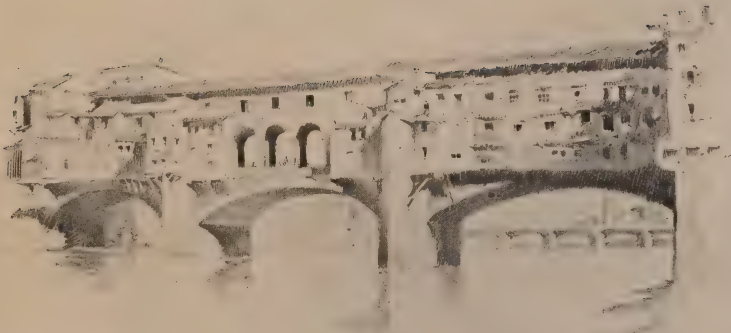
Illinois Society of Architects have removed their Executive Offices to Suite 735, 160 North La Salle Street, Chicago, Ill.

Emery Stanford Hall, Architect, has removed his offices to Suite 1306, Tacoma Bldg., Chicago, Ill.

James E. Self and Stephen B. Allen have opened an office for the practice of general architecture at 69-70 When Building, Indianapolis, Ind.

Robert Peal has removed has offices to 206 Leonard Building, 2014 East 105th Street, Cleveland, Ohio.





Pencil Sketches by George Maquolo.

THE DEVELOPMENT OF A DESIGN.

THE illustrations on pages 75, 76 and 77 together with the photograph reproduced on this page show the development of the design of the Harper-Poor Mausoleum, Woodlawn Cemetery, New York by the architect John Mead Howells, taking as a starting point the inspiration received from Bramante's Chapel of S. Giovanni in Oleo.

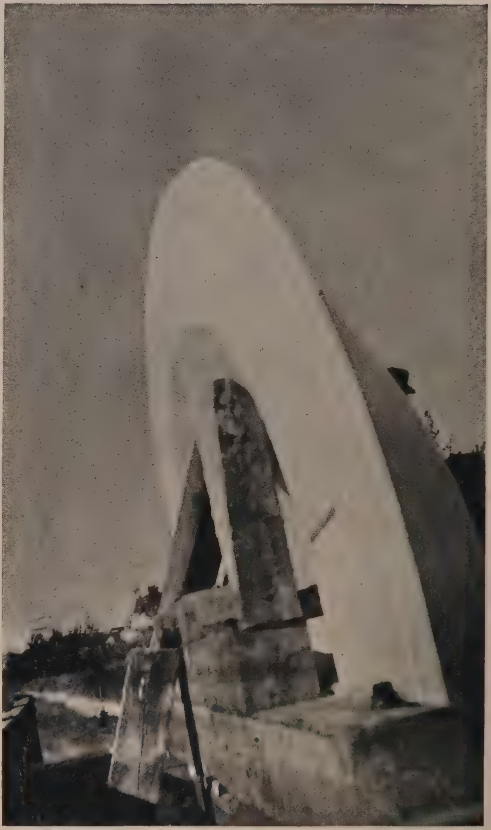
These illustrations are especially interesting because they show how architectural documents may be used in a way to produce new designs fitted to the requirements of the problems in hand—original solutions that carry on the traditions of the past and embody a part of the rich heritage left us by the architects of earlier days. This is an admirable example of drawing inspiration and making one's own design as distinguished from the mere copying of old works.

On page 76 is reproduced, at the exact size, a portion of a plate from Letarouilly's "Edifices de Rome Moderne," showing an elevation and a plan of Bramante's Chapel of S. Giovanni at Oleo, the building which inspired Mr. Howells' design for the Harper-Poor Mausoleum.

On page 75 is reproduced the pencil sketch Mr. Howells made for the purpose of showing his design for the mausoleum to the client. By comparing this sketch with the plate from Letarouilly, on page 76, the way in which Mr. Howells worked out his design may be seen. Since the mausoleum is much smaller than Bramante's chapel, about one-half the size, and since the size of a doorway is determined, more or less, by the height of a man, the door way is of necessity much larger in relation to the rest of the building in the mausoleum than in the chapel. On this account Mr. Howells did not attempt to use pilasters which would have made too many elements on a small building and would have produced a crowded effect. Instead he used pilaster caps only. Mr. Howells used a simpler treatment of the upper portion. One of the conditions that influenced the design was the regulation of Woodlawn Cemetery prohibiting joints in the roof of any monument, a good rule, since the cost of maintenance of a roof with joints would be a seriously large item in the perpetual care of the monument by the cemetery. It may be mentioned, by the way, that this monument is built entirely of marble blocks as the facing of walls is also forbidden.

In the photograph on this page the cap-stone to form the roof of the mausoleum is shown as it arrived at the cemetery in the largest pit-car obtainable. This stone is so large in diameter that the first attempt to send it from the quarries in the west was unsuccessful because the stone was too tall to pass under the bridges crossing the railroad. It had to be withdrawn and re-routed through Canada. At the right in this photograph will be seen a part of a man's hat, that serves to give the scale.

On page 77 is reproduced a photograph of the finished mausoleum, showing the design as executed, opposite the plate of the old building that inspired it.



Cap-stone for Harper-Poor Mausoleum on Pit-car at Woodlawn Cemetery. See text on this page and other illustrations on pages 75, 76 and 77.

THE PRINCETON ARCHITECTURAL PRIZES.

A FUND for annual prizes and other special purposes has been established in the School of Architecture of Princeton University by friends of the School. Two competitive prizes of six hundred dollars ($600) each, are announced for the year 1924-1925, to be known as the Princeton Architectural Prizes.

The purpose of these prizes is to place at the disposal of experienced draftsmen of unusual ability who desire to complete their professional training by study of the academic side of architecture, the advantages found in the School of Architecture, the Department of Art and Archaeology, and the Graduate School, of Princeton University.

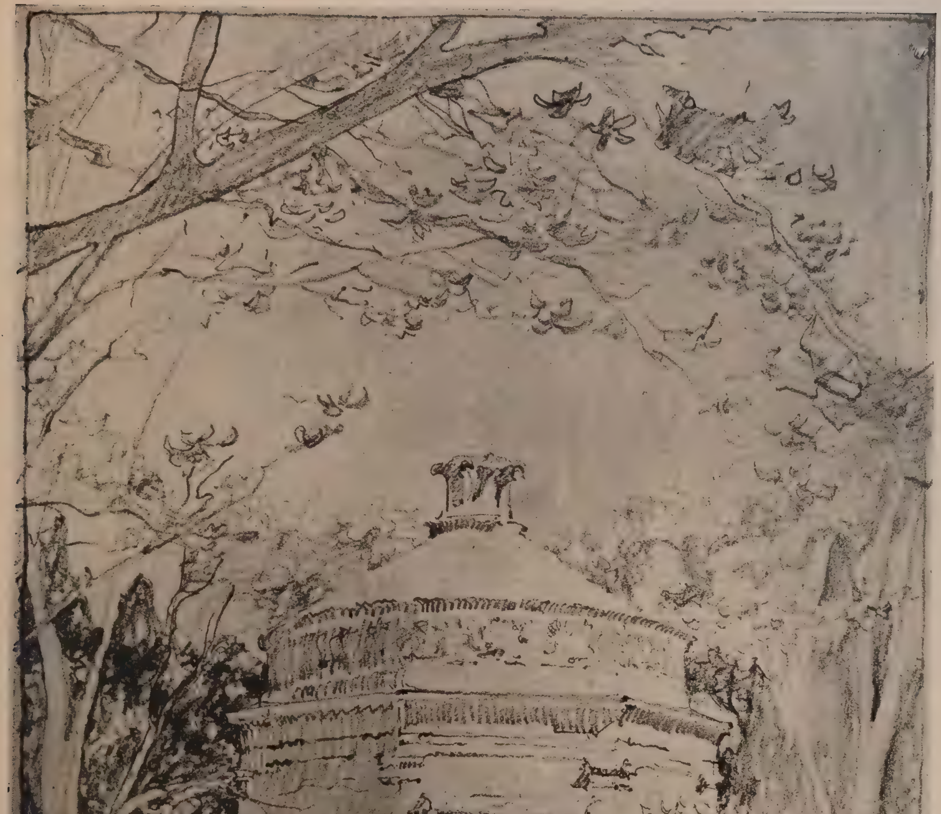
The winners of the Princeton Architectural Prizes will be permitted to reside in the Graduate College during the year of their tenure, although not candidates for degrees. They will be required to take the courses in Design, offered by the School of Architecture, and will have the opportunity of attending courses in the History of Architecture and the Allied Arts, in the Department of Art and Archaeology. They will be exempt from charges for tuition.

The awards will be made after a short elimination competition and a careful consideration of the personal records of candidates. The competitions will be held May 9 to May 18, 1924, inclusive. The supervisors will mail the drawings to Princeton not later than May 21.

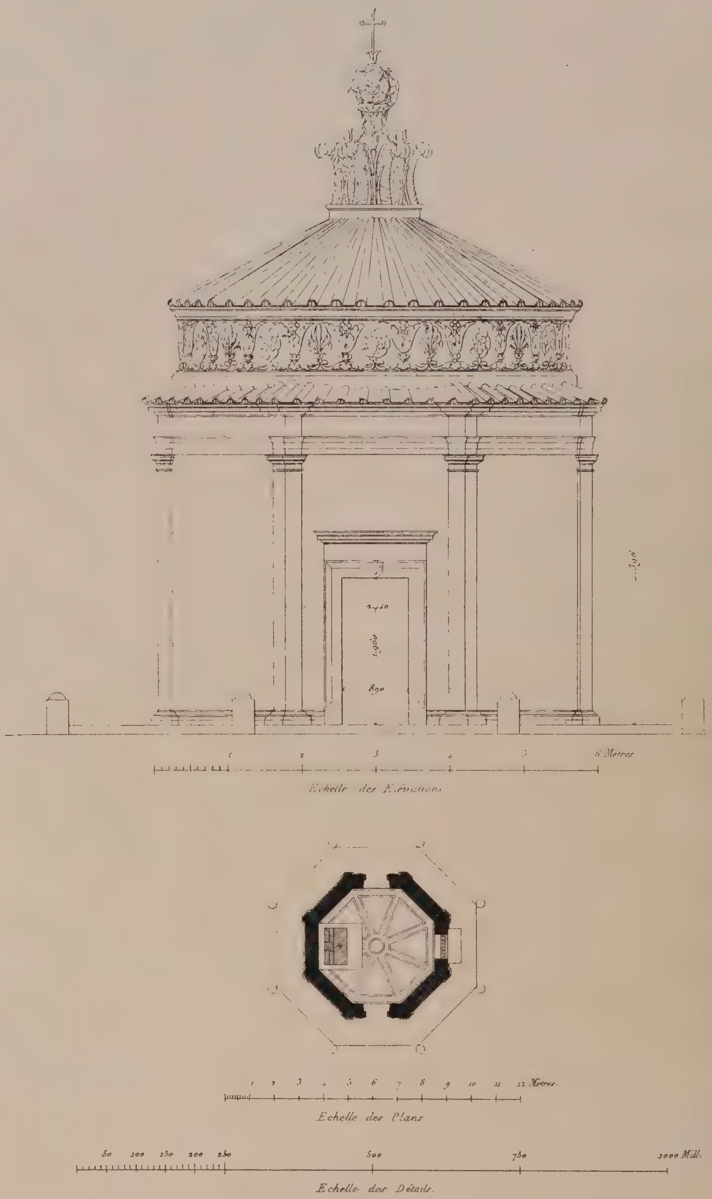
From the drawings submitted, five will be selected by a jury to be appointed, and the designers will be given an opportunity to come to Princeton to confer with the Director of the School of Architecture, and the Dean of the Graduate School. They will be the guests of the School of Architecture while they are in Princeton, but will pay their own travelling expenses. The final awards will be announced within ten days by the Director of the School of Architecture. The right is reserved to withhold either or both awards in case no candidates are considered to have reached the required standard.

Information and application blanks may be obtained by addressing the Secretary of the School of Architecture, Princeton University, Princeton, N. J.

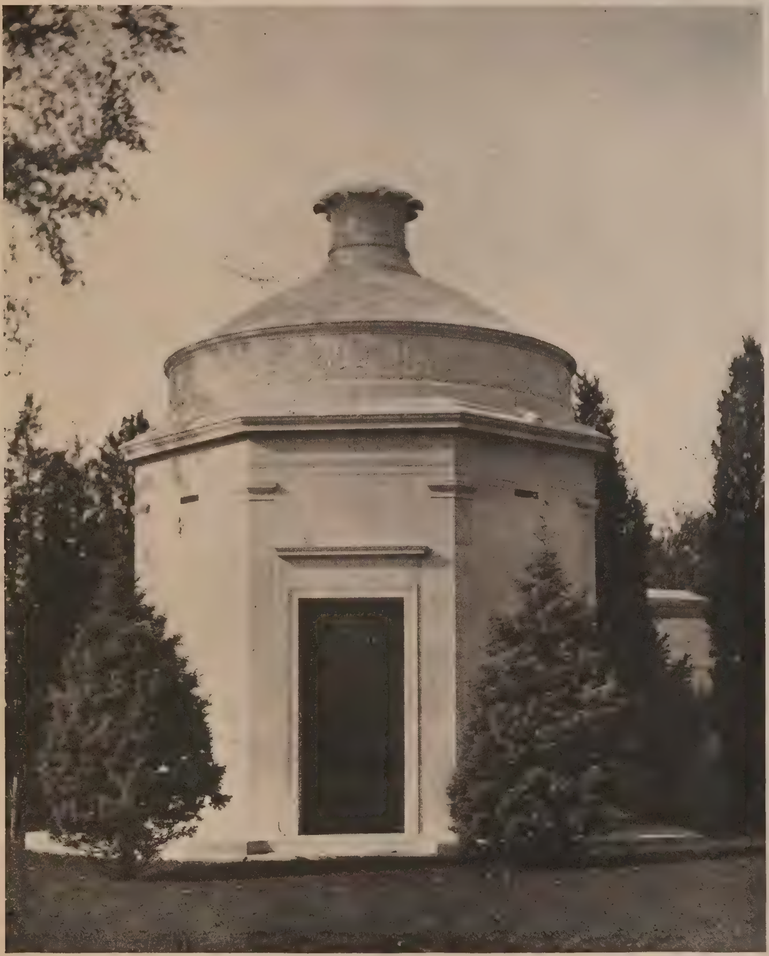
THE Chicago Architectural Exhibition will be held May 1 to June 1 in the East Galleries of the Art Institute of Chicago. The exhibition has heretofore been given by a committee appointed jointly by the Chicago Architectural Club, the Illinois Chapter of the A.I.A., and the Illinois Society of Architects. The functions of the committee have been taken over by the Chicago Architectural League.



Pencil Sketch made by Mr. Howells for presentation to the client. The Harper-Poor Mausoleum, Woodlawn Cemetery, New York.



Plan and Elevation of Chapel of S. Giovanni in Oleo, by Bramante. ***From*** *Letarouilly's "Edifices de Rome Moderne." (Reproduced at the exact size of the original plate.) This building supplied the inspiration for* ***Mr. Howells' design shown on page 75.***



Photograph of The Harper-Poor Mausoleum, in Woodlawn Cemetery, New York. John Mead Howells, Architect.

BERTRAM GROSVENOR GOODHUE.

BERTRAM GROSVENOR GOODHUE died Wednesday, April 23, at his home in New York as the result of a heart attack. Mr. Goodhue seemed in his usual health and spirits when he left his office Wednesday at the close of the day. He dined with friends and went to a theatre with members of his family. Upon his return from the theatre he suddenly collapsed and in a few minutes passed away.

Mr. Goodhue's death is keenly felt as a loss to the profession and to those who knew him personally. He was not only an architect of remarkable ability but a man who never spared himself in the effort to produce work of the most worthy character and who took a strong and active interest in the development of younger men, not only of those so fortunate as to be in his effice, but young men everywhere who were striving to advance in architectural study or work. As the news of Mr. Goodhue's death has come during the printing of this journal only this brief note can be published at this time.—EDITOR.

DIVISION OF ARCHITECTURE AND CONSTRUCTION FOR THE STATE OF NEW JERSEY.

ALAN B. MILLS, Director of the Division of Architecture and Construction, is conducting so unusual a building program for the State institutions in New Jersey that his work is of great interest to the profession at large and especially to those who are interested in institutional planning.

The work which is being carried on is epoch-making in its scope. Careful research is being carried on to determine the best solutions for the problems of the institutions. Expert administrators and specialists in various fields represented by the work are being freely consulted, so that the last word in modern institutional buildings may be represented by the finished product. A four year program, with an expenditure of $10,000,000, will complete the work that is in progress. Appropriations for the current year will erect buildings at Morris Plains State Hospital costing $1,150,000. The buildings include a Reception Hospital for 250 patients; Congregate Dining Hall and Kitchen for 1,600 patients and 375 employees; a group of buildings, providing living quarters for employees; two buildings, with a capacity of 30 patients each for convalescents; a Power House, and in addition to these, the necessary mechanical and landscape development.

The next important work that will be taken up will be a new institution for feeble minded women, to be located in North Jersey. It will take care of hundreds of feeble minded cases for which the State now makes no provision. The following buildings will be erected: Congregate Dining Hall and Kitchen, Industrial and Vocational Shops, Dormitories for 545 inmates, store house, heating and power plant, administration building, school building, hospital, farm buildings, laundry, together with other incidental buildings, mechanical equipment and landscape work. The estimated cost will be $2,398,000.

Another important project is the new Intermediate Reformatory for Men to be located in North Jersey. These buildings will be similar in their scope to that of the institution for feeble minded women. In addition to these major projects, there are many buildings that will be erected in the other institutions of the State in accordance with advanced thought in institutional planning.

Mr. Mills has developed his organization in Trenton along broad lines which offer everyone in the organization an opportunity to exercise his fullest capabilities. The opportunity offered is most unusual, as no similar program has ever before been carried out.

This will be most fully appreciated by those who are in touch with the institutional problems in this country, as the problem for caring for State wards has been allowed to slip year after year because of more pressing matters, until at the present time, the situation is most acute. Public sentiment is being aroused and State after State is falling in line with the idea of adequately taking care of its dependents. It will be seen that the work of the Department of Institutions and Agencies in the State of New Jersey is contributing to the foundation of much work that will be done throughout the country during the next decade.

THE FONTAINEBLEAU SCHOOL.

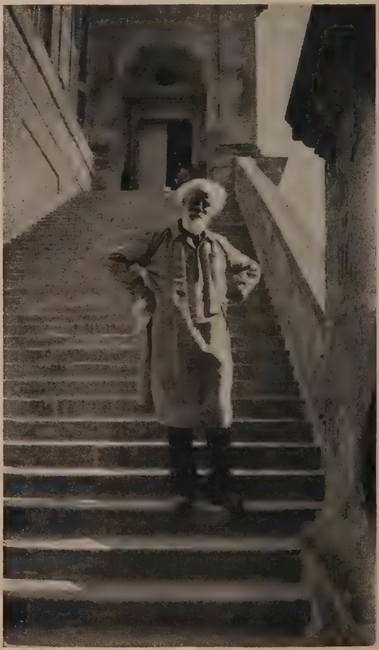
THE second session of the Fontainebleau School of Fine Arts will open at the Palace of Fontainebleau, in France, on June 25, and continue until Sept. 25. Applications for admission should be sent in at once as the number of students to be accepted is limited. Full information can be had by addressing Mr. Whitney Warren, care of the Fontainebleau School of Fine Arts, 119 East 19th St., New York City.

The purpose of the school is to provide an opportunity for American students to benefit by the influence of the great works of French architecture and the other fine arts and by contact which great French architects, painters and sculptors of to-day. The course includes visits to fine examples of architecture, museums, exhibitions, etc.

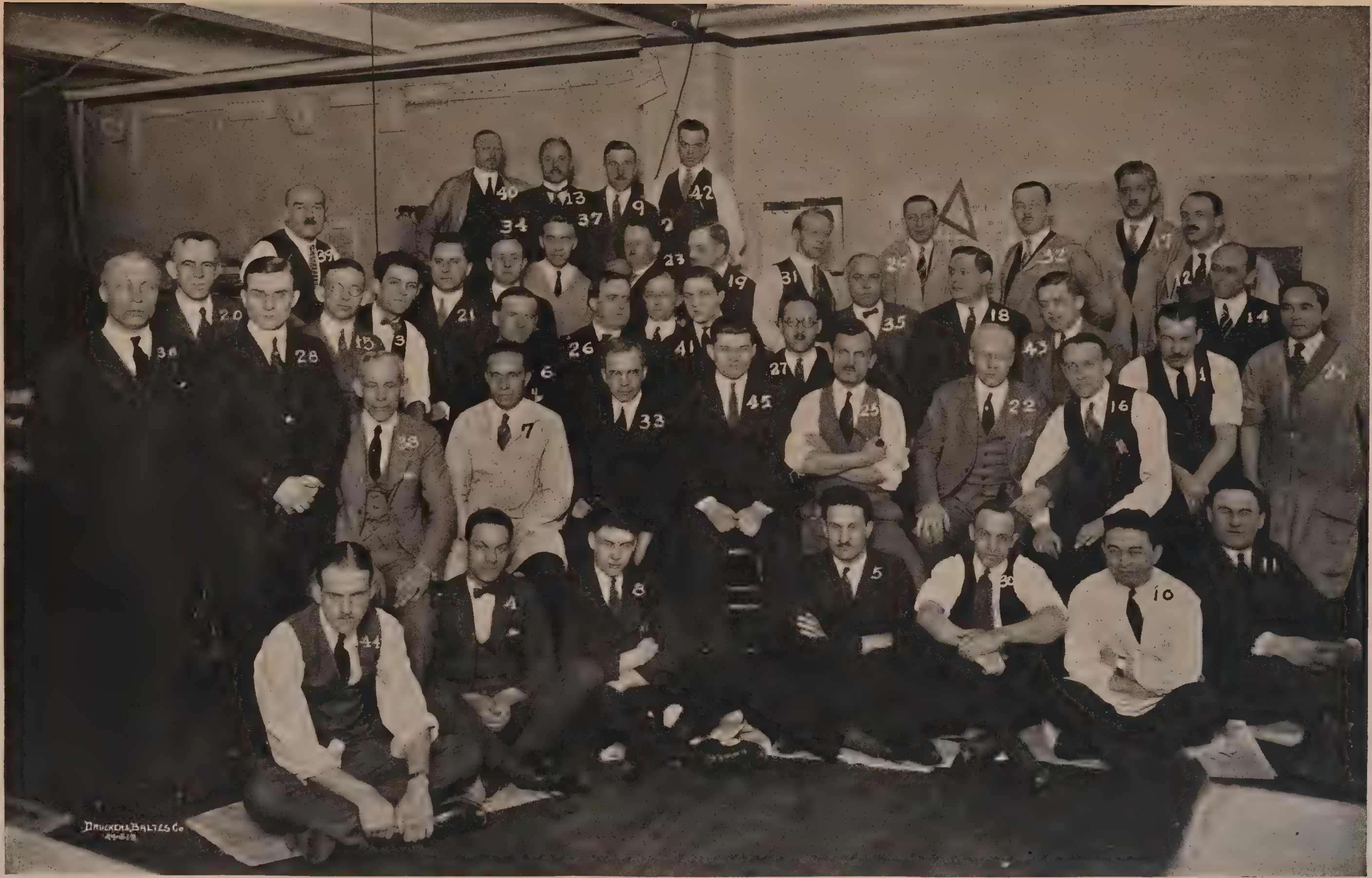
The instruction is designed to give a sound basis for appreciation of the best works in their relation to history and to the needs of the student. The school is not intended to replace any school or to duplicate the work of any school. It has a field of its own that has not hitherto been touched excepting by the A. E. F. school in the Pavillion de Bellevue, from which the idea of the Fontainebleau School took its origin.

The Fontainebleau School is under the patronage of the French Government and was founded by the late Lloyd Warren. The Headmaster of Studies in the Department of Architecture is Victor Laloux, and the work is carried forward under Jacques Carlu, Director.

Word has just been received that the New Haven Architectural Club will send the winner of the Club's Annual Scholarship to the Fontainebleau School this Summer, and that Delano & Aldrich, Architects, will send one of the best men from their office. Other Architectural Clubs and other architectural offices will probably do likewise—an excellent idea.



Professor Paul Baudoin, who teaches fresco at the Fontainebleau School of Fine Arts.



The Drafting Room Force of Warren & Wetmore, Architects, New York.

1—*R. Allen,* 2—*F. W. Bancroft,* 3—*M. G. Bitterbaum,* 4—*R. C. Campi,* 5—*E. F. Clapp,* 6—*H. J. Cullen,* 7—*E. Conti,* 8—*R. J. Cummings,* 9—*E. I. Daugherty,* 10—*L. J. Eaton,* 11—*F. K. English,* 12—*E. Frey,* 13—*F. Good,* 14—*A. W. Griffin,* 15—*K. B. Hill,* 16—*H. Hofmeister,* 17—*H. H. Heybeck,* 18—*C. M. Jaeger,* 19—*R. A. Kluge,* 20—*R. C. Lynch,* 21—*J. R. Lautenbach,* 22—*E. S. Lyman,* 23—*C. G. Munsell,* 24—*M. M. Mann,* 25—*S. M. Minoli,* 26—*J. C. Marsh,* 27—*J. L. Newman,* 28—*A. Pieron,* 29—*D. G. Rosenfield,* 30—*J. B. Surhoff,* 31—*R. T. Swezey,* 32—*P. A. Singer,* 33—*H. D. Symonds,* 34—*C. D. Thompson,* 35—*P. B. Tallman,* 36—*H. D. Upton,* 37—*N. T. Valentine,* 38—*T. E. Videto,* 39—*N. Vasselieff,* 40—*R. L. Watmough,* 41—*N. R. Webber,* 42—*A. P. Wolf,* 43—*L. M. Wolff,* 44—*G. Walling,* 45—*A. Zaborowski.*

THE HUMAN ELEMENT IN THE ARCHITECT'S ORGANIZATION.

THE discussion upon this subject would necessarily indicate that the minds of the Profession are open to ideas that will promote a better relationship between the architect and the draftsman. The final solution of the problem for either must needs be an individual one, for each to recognize that certain codes, laws, or principles provide for the necessary understanding or harmony in human relationships, as well as in art, music, or engineering.

Wherever he may be, each individual must meet his present problems. The draftsman too often makes a change to another office, expecting this to be the answer, when what he should have changed was his own ideas. A draftsman can facilitate work by many methods besides drawing the lines instructed so to do by a superior, he can see that an Associate—whom his pride would make him subordinate—really could tell him of many points where the work might be improved. But fear of losing credit for himself holds him back, keeps him from opening his mind to bigger ideas, not only of principle but of his own practical art. A real spirit shown by a draftsman to subdue himself to promote work will soon make a real impress on those who give credit—for it cannot be hidden.

Fear of humiliation plays a large part in keeping a draftsman's imagination (his greatest asset when properly let play) subdued. In neglecting to take account of the ever present "human element" too many superiors will unconsciously and probably with no ulterior motive, ridicule any idea that hasn't been current there for years, or for which the offending draftsman cannot show the volume from which it was taken. The ridicule may be in the form of a smile (which is often an insult to a sensitive man), it may be a consistent neglect to take that man's work seriously, and it might be the frank turning of a particular piece of work over to another man. After a period of such experiences the draftsman loses interest, he tries no new ideas, slowly he becomes a mere mentally lazy automaton—a type the architect often feels encompasses the whole profession. His first ideas probably were crude, not suitable to the particular case, but a man, a superior who knows the laws of co-operation, goodwill, friendship, etc., would have at first not criticized but possibly would have seen something of merit in the effort (if not in the drawing) worth stimulating in this particular imagination, and with a few careful hints, suggestions, encouragements, caused an interest to be aroused that would continue to grow—and above all, to let this individual think and realize that he is one of the force, part of a unit; that in creating various structures is one active in a living art, and thus as a whole is giving vent to his need for self-expression and is fulfilling the law for an individual realization of harmony.

A draftsman is paid to use his mind and can only do so when obstructions are removed and the exercise necessary to improvement maintained. A sense of lack, of not getting the pay deserved or needed, is a big boulder to remove from a path where constructive thinking should proceed. In one form or another it can occupy a large portion of a draftsman's time. In taking stock of himself fairly and honestly he should assume his proper place on the payroll, as well as his relationship among the force at work. But often with the most conscientious this does not satisfy. To see an employer enjoy all the material benefits of life, seemingly the only necessities to remove one's own inharmonies, often causes a thought of unfairness in the division of rewards being reaped by this unit of which he should be a conscious part. The writer is not a socialist, but believes the thought just mentioned should be entirely removed and could be by either a careful attention to salaries and promotions and by that form which would tie him stronger than anything else to his organization—a profit-sharing scheme. I am certain that most all draftsmen during a lull—a no profit period—would accept deductions without a complaint and make other sacrifices could they feel their fortunes would rise with their employer's.

Business has become the big and strong factor it is to-day not by accident but by some real application and thought to its needs. Certainly, architecture (which has not been lagging) can afford to take some lessons from Business and still not be bound by its unpleasant forces.

C. H. Kiefner,
of the office of H. T. Lindeberg.

THE ARCHITECTURAL CLUB OF NEW HAVEN.

ONE of the best things the Club has done is the giving of a course of lectures on "The Trend of Architecture in America." This is to consist of six lectures, free to the public, given in the Trumbull Gallery, the School of Fine Arts, Yale University. The first lecture "The Development of Style," was given by Dean Everett V. Meeks of the Department of Fine Arts, Yale University. The gallery was crowded to the doors. This was given about four weeks ago. The second of the series was given by Mr. Harvey W. Corbett, President of the Architectural League of New York. His subject was "City Zoning." The next lecture was given on March 27th by Mr. Benjamin Wistar Morris of New York, whose topic was "Modern Commercial Buildings." The fourth lecture of the course will be "Some Influence of the Gothic in Modern American Architecture," given by Mr. Charles Z. Klauder, on April 3rd; the fifth of the series is to be on April 17th by Mr. Dwight James Baum on "Modern American Residences." The final lecture will be given by Mr. Charles Adams Delano. His subject will be "Decoration as Applied to Architecture." The dates for the last two lectures have not been exactly determined.

In arranging this course of lectures the Club was greatly assisted by Dean Meeks.

From the character of the lectures and their topics an opinion of the worth of these talks can be formed and it is hoped that we can make these lectures an annual affair with the view to benefiting both the lay public and the local members of the architectural profession.

A Scholarship for a Connecticut Architect to The Fontainebleau School of the Fine Arts is being given by the Club. The competition will be in the form of an intensive sketch "en loge" to be held in New Haven over a period of three days, April 25, 26 and 27, 1924. Information regarding this competition may be had by addressing A. W. Boylen, Chairman, 39 Center Street, New Haven, Conn.

The Fifth Annual Exhibition of The Architectural Club of New Haven will be held for two weeks beginning April 19th at the Trumbull Gallery, Yale School of the Fine Arts.

PENCIL POINTS SKETCH COMPETITION

THE program for the Pencil Points Sketch Competition for 1924 is printed on another page of this issue. The conditions are in general the same as in former years and as ready and active participation is looked for as in the past.

This competition, like the sketch competitions previously conducted by this magazine, is open to draftsmen, students, architects, everyone excepting professional renderers, by which we mean one who derives his principal income from making renderings otherwise than on a salary basis.

The subjects must be architectural but need not be large or fine buildings. The man who happens to be where there is no monumental architecture has as good an opportunity as anyone. Read the announcement on another page and send in your sketches.

BROADCASTING "SERVICES OF AN ARCHITECT."

THE work being done by C. E. Schermerhorn, architect, of Philadelphia in broadcasting his talk on the "Services of an Architect," is to be highly commended and it is to be hoped that other architects in other parts of the country will take up this work of acquainting the public with the nature and value of the services an architect renders. This talk has been given to date from the following stations. WDAR, Lit Bros., Philadelphia, Pa.; KDKA, Westinghouse Electric and Mfg. Co., Pittsburgh, Pa.; WFAV, University of Nebraska, Lincoln, Neb.

TEXAS A. AND M. COLLEGE ARCHITECTURAL CLUB.

IN QUEST of inspiration on a new problem today, I was looking back through my two bound volumes of PENCIL POINTS (bound 'em myself), as I usually do when I want inspiration. I came across a report of the Los Angeles Architectural Club, in which the writer started out on the following hypothesis: "He that tooteth not his own horn, same shall not be tooted." Being of a similar opinion, and also the official reporter of the Texas A. and M. Club, here goes a short solo on my trombone:

Texas A. and M. College maintains one of the best architectural departments in the State, and has over one hundred and twenty-five students enrolled for Architecture at present. We have a very capable faculty, composed of Prof. E. B. LaRoche, Head of the Dept., H. N. June, Professor of Design, G. W. Gill, Professor of Structural Design, G. A. Geist, Professor of Freehand Drawing, and W. L. Bradshaw, Instructor in Design. All are well liked by the students.

The students have had an Architectural Club here for many years, and this year it is bigger and better than ever. Under the leadership of Zay Smith, the Club is accomplishing a good deal. Zay, be it said, is an expert rifleman, and he hits the bullseye in anything he tackles. Any student taking Architecture is eligible, and becomes a member by simply paying his dues; the Faculty of course, are honorary members. Our officers are, Zay Smith, president, H. M. Tatum, vice-president, F. J. Ferrucci, treasurer, R. J. Werner, secretary, and S. T. Allen, reporter.

The purposes of the Club are, to secure the maximum of co-operation between students and Faculty; to stimulate more personal interest in the profession; and finally, to benefit the members by exchange of ideas. At the meetings, which are held every two weeks, we discuss everything from sculpture to the latest movie (such as "Ashes of Vengeance") which shows any period styles. Occasionally we have some prominent architect to visit the College and address the Club on some interesting phase of our chosen profession.

The climax of the Club year is a social event, generally a dance or a banquet. This year we are planning to make it an affair absolutely unique and distinctive—not a dance, not a banquet, but something more than a combination of the two. It will be held in the large drafting room, decorated for the occasion as an artist's studio would be.

ARCHITECTURAL BOWLING LEAGUE OF NEW YORK.

JUST as we had about convinced ourselves that the Architectural Bowling League of New York was the greatest organization in the profession anywhere, not to speak of being unique and original, the wide circulation of PENCIL POINTS brings to light the fact that we have many satellites in our train. To make matters worse, their records show them to be almost as good as we are, which, if course, will never do. In fact, it simply cannot be allowed, even if we have to make up a team of subs, to lick every contender in the field, including our good friends in Detroit, Chicago and other foreign cities.

Mr. Andrew F. Euston of Sommerfeld & Steckler's office was awarded the prize for the best design submitted for our new medal. M. Euston is working at present in the competition for the Paris Prize in which he now stands third out of the five best in the country.

Our Smoker which was given Monday evening, March 3rd, was a howling success. Actual count at the door showed an attendance of 273 men, all of whom were unanimous in their approval of the exceptional entertainment provided for the occasion. We were honored by the presence of many well known architects.

The Annual Dinner which was held Tuesday evening, April 15th, at the Pershing Square Savarin was attended by over 300 men. President Capel gave a brief history of the League since its inception in 1906 and introduced the various speakers. Secretary Valentine read off the standing of the teams in the five, three and two man tournaments as follows:

Team	Won	Lost	Average
McKenzie, Voorhees & Gmelin	20	2	742
Dwight P. Robinson & Company	18	4	759
Warren & Wetmore	17	5	699
Cass Gilbert	14	8	679
W. L. Stoddart	13	9	670
A. C. Bossom	10	12	654
J. G. Rogers	10	12	641
T. W. Lamb	9	13	634
B. W. Morris	7	15	626
McKim, Mead & White	6	16	594
Sommerfeld & Steckler	6	16	565
Donn Barber	1	21	563

Black, of D. P. Robinson office,
High Score 226

Ackerman of McKenzie, Voorhees & Gmelin,
High Average 163 10-11

Team of D. P. Robinson,
High Score 845

FINAL STANDING OF TEAMS IN THREE MAN TOURNAMENT

	Won	Lost	Average
Dwight P. Robinson	10	1	491
(McKenzie, Voorhees & Gmelin	9	2	475
(Cass Gilbert	9	2	461
Warren & Wetmore	7	4	459
Benjamin W. Morris	7	4	429
Donn Barber	5	6	407
McKim, Mead & White	4	7	429
W. L. Stoddart	4	7	420
Alfred C. Bossom	4	7	388
James Gamble Rogers	3	8	407
Thomas W. Lamb	3	8	363
Sommerfeld & Steckler	1	10	381

Three man

Johnke, of D. P. Robinson office,
High Score 235

Read, of Cass Gilbert's office,
High Average 171 1-11

Team of McKenzie, Voorhees & Gmelin,
High Score 559

FINAL STANDING OF TEAMS IN TWO MAN TOURNAMENT

Team	Won	Lost	Average
Dwight P. Robinson	10	1	310
(McKenzie, Voorhees & Gmelin	8	3	295
(Warren & Wetmore	8	3	288
Cass Gilbert	7	4	283
Alfred C. Bossom	7	4	264
W. L. Stoddart	5	6	283
Thomas W. Lamb	5	6	268
Sommerfeld & Steckler	4	7	256
James Gamble Rogers	4	7	252
McKim, Mead & White	3	8	263
Benjamin W. Morris	3	8	255
Donn Barber	2	9	268

Two Man

Corry, of Warren & Wetmore's office,
High Score 207

Miner, of D. P. Robinson office,
High Average 159

Team of Thos. W. Lamb office,
High Score 344

Principal speakers of the evening were Mr. D. Everett Waid, Mr. Cass Gilbert, Mr. Andrew C. McKenzie and Mr. Robert D. Kohn. Mr. Kohn also made the presentation of the trophies and medals.

Tuesday evening, May 6th, we will hold a formal dance at the Ritz Carlton. It is the desire of the Committee to hold down the number of couples to four hundred so as to avoid over-crowding and assure pleasant dancing to one of the best orchestras in New York. Secretary Valentine will be pleased to arrange for hotel accommodations for that night for any out-of-town architects, if they will communicate with him.

A meeting will be called to elect officers and re-organize for the coming year. All architectural officers wishing to enter teams should communicate with one of the following officers:

President Emil L. Capel, care of A. C. Bossom, 680 5th Ave.;
Vice-President Henry G. Poll, care of Cass Gilbert, 244 Madison Ave.;
Secretary, Norman T. Valentine, care of Warren & Wetmore, 16 East 47th St.
Chairman Active Members, Patrick Lynch, 709 Sixth Ave.;
Chairman Publicity, Donald Campbell, 119 West 40th Street.

HERE *and* THERE *and* THIS *and* THAT

Conducted by RWR

WE ARE indebted to Pencil Pointer Fred D. Dagit of Philadelphia for a splendid suggestion. Mr. Dagit, during the time he studied at the American School of Fine Arts, Fontainebleau, kept a little sketch book on the pages of which his fellow students made sketches in the nature of mementos. Three of these are reproduced herewith and it occurs to us that other readers may have kept similar sketch books, including both their own work and the work of their friends, which have never been published. So if you have a sketch book lurking around somewhere, why not let us have a look at it?

THE Golf Tournament and Barbecue for the architects of Atlanta, Ga., has been postponed from May 9th to May 16th.

PROPOSED TENNIS TOURNAMENT

THE reorganized Architectural Bowling League of New York has just completed a most successful bowling season and is considering the possibility of running off a tennis tournament during the coming summer.

League officials are anxious to learn what interest in such a project exists among the architectural draftsmen of the Metropolitan District.

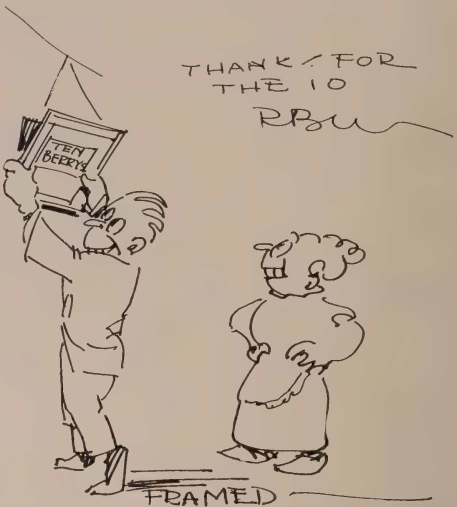
Tentative plans include both singles and doubles tournaments. The suggestion has been made that elimination matches be held in the several districts, viz., Bronx, Manhattan, Brooklyn, Queens, Richmond, Westchester, New Jersey, and Long Island.

If sufficient interest is shown, an organization meeting will be held in the latter part of April.

All who wish to take part in this tennis tournament, or to help boost it, are cordially invited to communicate with the undersigned as soon as possible.

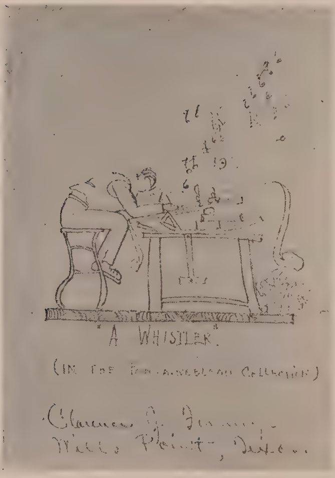
A. F. Darrin, *Executive Committee,*
Architectural Bowling League of New York.
949 Park Place, Brooklyn, N. Y.

DRAFTSMAN R. B. WILLS of good old Boston wins the prize for his clever contribution to this department for March. Come again Brother Wills, say we! Here is a reproduction of Mr. Wills' receipt.



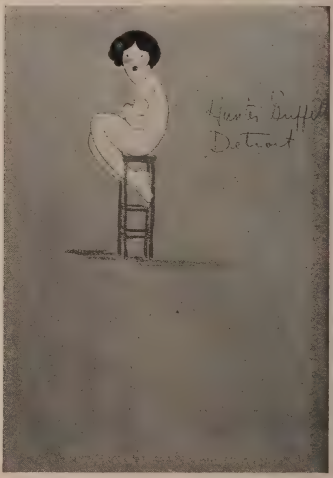
And Ernest Olaf of Kansas City gets the ten dollar check for his contribution to the April issue.

MR. PAUL STUDER, whose sketch was shown in this department last month, announces that he has opened a studio at 405 Lexington Avenue, New York City. He will specialize in making renderings.



Action Picture, by C. J. Finney.

Portrait of Bro. Dagit, by K. McLeary.



Study of Model, by Hunter Griffith.

Mementos of Friends at Fontainebleau, from the Sketch Book of Fred D. Dagit.

OF course you all remember Mrs. Ruth L. Gerth, the girl from Minneapolis who pulled down the five hundred dollar prize in the PENCIL POINTS competition on Garden Accessories of Face Brick. Well, here she is again. Here is her letter with a reproduction of the accompanying sketch.

"HURRAH! for the new section in the PENCIL POINTS magazine. It is splendid. It has added a lot of interest and lots of "pep." I am sure every one enjoys the section.

"I am enclosing a little fixture sketch which I thought you might like for the new section. I notice that all the pencil sketches shown in the magazine are scenes. Aren't sketches of objects interesting or do you consider Scenes to be in a class by themselves? Hm, what say?

"I am very much interested in sketches of objects and I know that others in the building here are, too. Mayn't we have some in the new section?

"Sincerely,
"RUTH L. GERTH."

Answering Mrs. Gerth's question, there is no rule, written or otherwise, barring sketches of objects from this department. In fact this department has no rules anyhow. Sketches or drawings of objects are just as welcome as drawings of Madison Square Garden or pictures of the sad sea waves. So that's that!

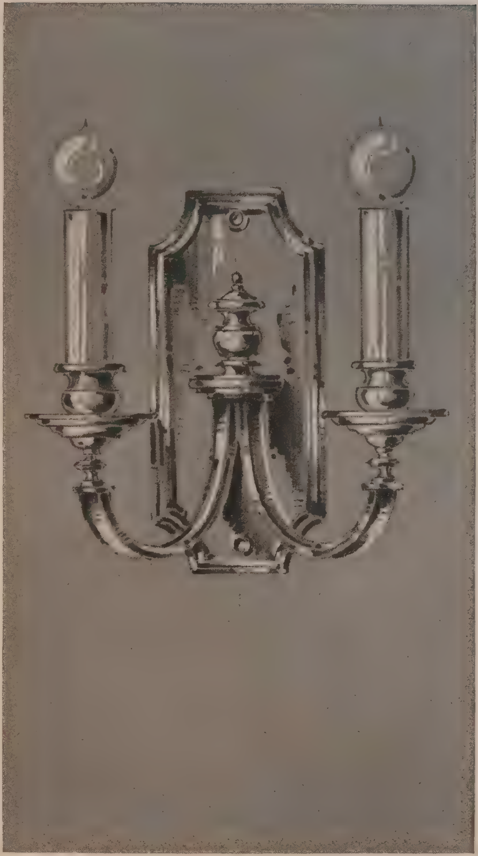
Mr. S. Young Wai, 12 Dover Street, Summer Hill, Sydney, N. S. W., Australia, wants a copy of PENCIL POINTS for December, 1923.

Mr. Natt Piper, care of Piper, Kahrs, Dedrick & Bobbe, 441 East First Street, Long Beach, Calif., wants copies of PENCIL POINTS for December, 1922, and March, 1923.

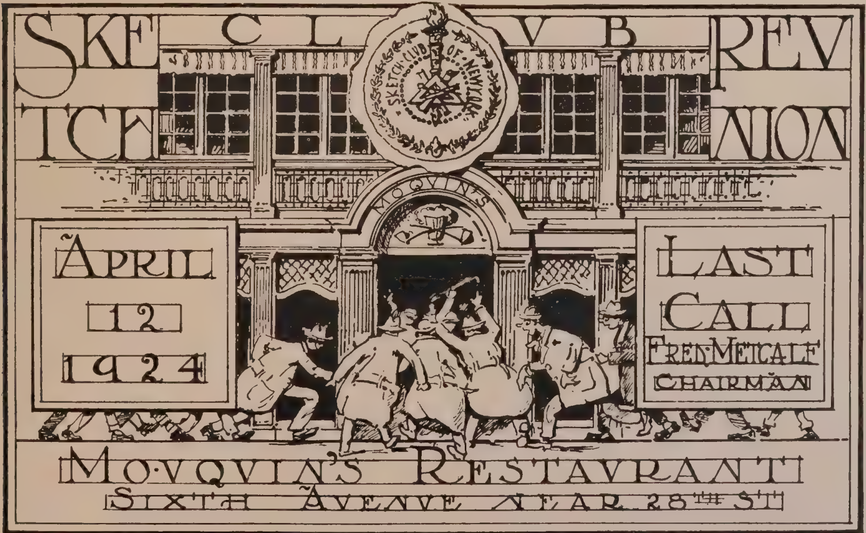
Mr. Joseph A. Hickey, 38 Burnside Street, Providence, R. I., would like to secure a copy of PENCIL POINTS for January, 1923.

WE ARE constantly receiving orders for back copies of PENCIL POINTS which we are unable to fill. Here is a list of all the copies in stock. Price twenty-five cents each.

1920—Dec.
1921—June, July, Sept., Oct., Nov., Dec.
1922—Aug., Oct.
1923—May, June, July, Aug., Sept., Oct., Nov.
1924—Jan., Feb., March.



Sketch by Mrs. Ruth L. Gerth.



Announcement of Sketch Club Reunion.

In response to the letter from Mr. Johnson published in this department for March, suggesting that examples of lettering appear in our pages, we have received a sheet from Mr. Carl H. Faltermeyer, Philadelphia, reproduced herewith. This is the style of lettering used by Mr. Faltermeyer on plans and elevations. We showed this sheet to Mr. August Reuling, with McKim, Mead & White, who recognizes the merits of the draftsmanship but is not in sympathy with the style of lettering employed. With the permission of Mr. Faltermeyer we print herewith Mr. Reuling's criticisms.

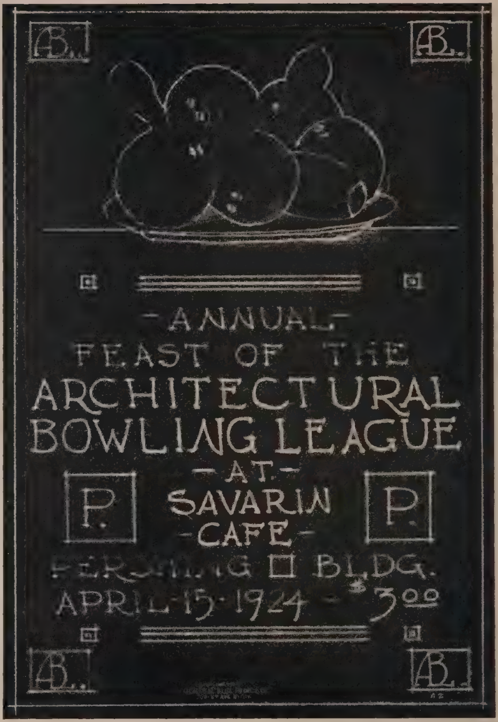
"It seems to me to be very trick lettering and since the Pencil Points magazine is being used a lot by young students it will tend to get them in trouble especially since it is a rather attractive sheet and the draftsmanship neat. My idea is always to adhere to the strictly classical letters, no matter where and how used. For working drawings (the type of letters which this sheet seems to cover), if one wants to do it rapidly the letters may be sloped or done in a vertical fashion so long as the fundamental principles of the classic letters are preserved. Once a student starts with trick stunts he is apt never to recover.

"Yours very truly,
(Signed) A. Reuling."

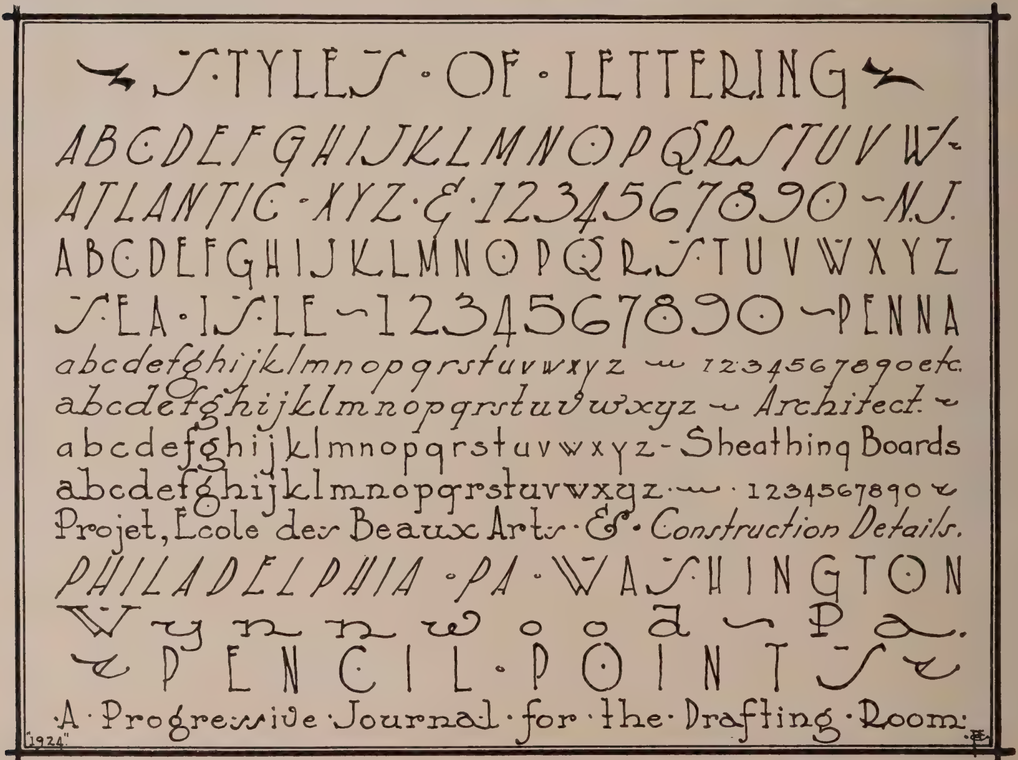
Now, let's have some more examples of lettering suitable not only for use on plans but also for inscriptions and tablets on buildings. It is not necessary to make a special sheet, but send in photostats of some of your good lettering and let us make up a page or two for next month. Discussion as to the merits of examples of lettering shown is invited.

Mr. R. E. Triggs, Jackson, Miss., is interested in designs and plans of church buildings. Any architects having published reproductions of their work are invited to send copies to Mr. Triggs.

The Province of Quebec Association of Architects, 590 Union Avenue Montreal would like to secure a copy of Pencil Points for March, 1923.



Announcement of Bowling League Dinner.


STYLES·OF·LETTERING
ABCDEFGHIJKLMNOPQRSTUVW-
ATLANTIC-XYZ·&·1234567890-N.J.
ABCDEFGHIJKLMNOPQRSTUVWXYZ
SEA·ISLE-1234567890-PENNA
abcdefghijklmnopqrstuvwxyz - 1234567890etc.
abcdefghijklmnopqrstuvwxyz - Architect -
abcdefghijklmnopqrstuvwxyz-Sheathing Boards
abcdefghijklmnopqrstuvwxyz - ·1234567890
Projet, Ecole des Beaux Arts·&·Construction Details.
PHILADELPHIA·PA·WASHINGTON
Wynnwood - Pa.
PENCIL·POINTS
·A·Progressive·Journal·for·the·Drafting·Room:
1924

THE ARCHITECTURAL CLUB OF LONG BEACH.

THE newly elected officers of the organization for the coming year are as follows: President, H. H. Lochridge; First Vice-President, Natt Piper; Second Vice-president, W. Horace Austin; Secretary, E. R. Bobbe; Treasurer, Leonard Wikoff; Sergeant at Arms, R. L. Wertz.

At the last meeting, on April 7, which was held at Recreation Park Club house a wonderful four reel lecture was delivered showing the water power developments of Southern California. This was delivered for us by the Southern California Edison Co.

A proposition was made to the club by one of the real estate firms of this city offering one thousand dollars in prizes if we would sponsor a competition for small houses. This was accepted and a competition will be held soon. Maybe you would like to see just what we are doing and as soon as possible after the competition is over we will submit the prize winners to you.

A request came from the city building department asking that we appoint a member to act with the city to pass on the qualifications of structural designers who submit plans for permits. President Lochridge appointed Warren A. Dedrick to the place.

The new president is now making a determined effort to bring the status of our club to a higher level and the last meeting was a very satisfactory one due to his work.

A QUICK CHANGE IN PLAN AND SPECIFICATIONS

Architect: How long will it take to get an order of steamed clams?

Waiter: About ten minutes, sir.

Architect: Bring me a bowl of pea soup and a baked apple!

MR. JOHN S. VAN WART, inventor and draftsman of Rye and New York City, thinks that a little practical stuff in this department would find favor with our readers. He has worked out a method of building a concrete lawn roller at home. It seems better to attempt a lengthy explanation. This device is not patented and the idea set forth may be used by any reader of PENCIL POINTS.

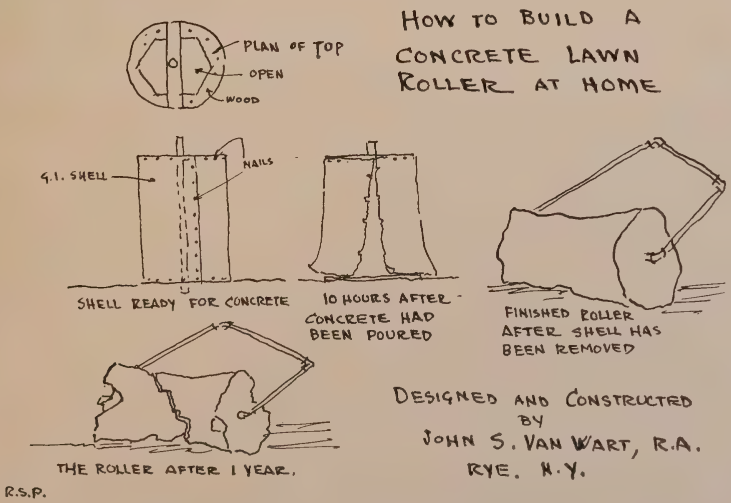
Design for Announcement of Dance of Architectural Bowling League of New York, to be given May 6 at the Ritz-Carlton.

A HISTORY of the Architectural Department of M. I. T., by Professor William Emerson, was printed recently in the *Tech Engineering News*. It gives a most interesting and inspiring vista back through the years of development of the school. Professor Emerson pays tribute to Professor William R. Ware, under whose guidance the Department came into existence and to the other men whose thought and efforts have contributed to the growth of the Department in the succeeding years.

Mr. Cass Gilbert, 244 Madison Avenue, New York City, is anxious to secure six copies of PENCIL POINTS for December, 1923.

Mr. H. C. Symes, 237 Riverside Drive, Knoxville, Tenn., desires a copy of PENCIL POINTS for January, 1921.

A reader of PENCIL POINTS would like to buy copies of Sylvanus Baxter's "Mexico" and Geymueller & Steggman "Italian Renaissance" (original). Anyone desiring to dispose of copies of these books is invited to submit prices to "Bibliophile," care of Pencil Points.


HOW TO BUILD A CONCRETE LAWN ROLLER AT HOME
PLAN OF TOP
OPEN
WOOD
G.I. SHELL
NAILS
SHELL READY FOR CONCRETE
10 HOURS AFTER CONCRETE HAD BEEN POURED
FINISHED ROLLER AFTER SHELL HAS BEEN REMOVED
THE ROLLER AFTER 1 YEAR.
DESIGNED AND CONSTRUCTED BY JOHN S. VAN WART, R.A. RYE. N.Y.
R.S.P.

How to Build a Concrete Lawn Roller at Home, by John S. Van Wart.

WE STARTED something in opening up this discussion of how best to file plates and other reference matter so useful in the drafting room and usually so hard to find. Architect Charles I. Barber of Knoxville, Tenn., contributes the following:

In response to an inquiry in the January Pencil Points for data concerning the filing of architectural plates, I offer you a description of the system in use in the office of Barber & McMurry.

This system applies only to periodicals, photographs and such material as may be properly separated, classified and filed, more or less, as individual sheets.

Since the problem is such that a perfect solution is impossible I have treated it much in the same manner as other familiar architectural difficulties are treated. For instance, it is impossible to file, in two places, a single plate which illustrates two desirable subjects. The necessity of grouping similar subjects is assumed. Imagine one searching hundreds of volumes on mixed subjects for references to a single subject. The system under discussion was based upon the following requirements. It should be simple to install and maintain and easy to use. Subjects should be grouped, as above, and a system of plate identification should be used which would permit of easy refiling.

One of the faults of this method is that the magazines must be torn apart, the plates culled, trimmed, classified, numbered and filed. The process is a continuous one, but it pays. Each sheet is trimmed with a photograph cutter to the standard A.I.A. document size. Since most publishers have adopted this standard size the work of cutting is reduced.

The real work is that of classification the first operation of which is the binding together of all sheets pertaining to any one building or subject. Usually special numbers are filed intact. For separating the subjects I place the plates in handy folders which are duplicates of those in the permanent files. The plates are numbered to correspond to the numbers on the folders and as they accumulate they are placed vertically in permanent steel files, sections of which may be added as needed.

The system of identification consists of alloting to each grand division a numeral, the subdivisions of which are marked by numerals from one to ten. The numbers are stamped on each plate so that they appear at the upper right corner when filed. For example the grand division of residences is designated by the numeral one.

1—1 designates Houses U. S. Country, Colonial, brick and stone.
1—2 designates Houses U. S. Country, Colonial, frame.
1—3 designates Houses U. S. Country, English, brick.

This method continues through each division. Note the convenience afforded by the arrangement of the subclassifications. First named is the grand division and following logically is the nationality, type (city or country) style and finally the materials of construction.

It is apparent that this system does not group the subjects according to author, for reasons that are obvious in this case, or according to geographical location, as the illustration is the evidence, or according to size, as quality and ideas are not determined by dimensions. The few exceptions may be separately located, but they would not ordinarily justify the complicating of the system. To a few outstanding of favorite authors are given separate folders.

Each division is separated by a heavy cardboard and upon it are large numerals designating the division following. Upon each sub-division folder and upon each plate is stamped the division and sub-division numerals. Upon the outside of each file section are numbers indicating its contents. A thumbed, loose leaf index, designating the subjects alphabetically with numbers opposite enables one to find any subjects instantly. Another convenience is the ease with which any one may refile plates in their proper places.

As far as possible the main divisions are grouped according to their relations to each other. Starting with residential No. 1, continuing with decorations No. 2. Landscape No. 3, then Institutional Architecture—Ecclesiastical—Fraternal—Hospitals—Hotels—Commercial Architecture, Industrial and so on, each with its division and sub-division numbers. Articles are usually placed in sub-division folders and filed in the same manner and division with the photographs. However, there are separate divisions for articles that do not group with the plates. Foreign plates and foreign photographs are grouped with American, according to subject. For example all English houses have one folder under No. 1 division, which is houses. English churches is under its proper division, with other churches. So far these are the only English subdivisions. For places such as Pompeii and Japan a separate folio is alloted to each and they are given a common division."

MR. PAUL V. L. STEWART, of Cleveland, Ohio, has the following to say on this subject, and even though it takes a lot of space we present herewith the classification he uses in filing.

"Here is a contribution for "Here and There and This and That," in answer to inquiry as to method of filing plates, etc.

First, I have a numbered classification of buildings of all types. I enclose herewith a copy of the classification which I am using.

Next, I secured from a printer sheets of tag board, cut to 13″ x 20″, and from each of these made a folder measuring 13″ x 10″ on the back, 13″ x 9½″ on the front, with a ½″ "accordian" fold at the bottom to allow for expansion.

A specially made box or cabinet, of proper size and capacity, completed the equipment. If the folders are kept down to regular letter size, as could be done now, the ordinary letter file can be utilized.

The rest is simple. Number each plate according to the index and file it away (requiscat in pace). If desired, the first three letters of the name of the city may be added, along with the first three letters, or the initials, of the architect's name, and several plates of one building thus kept together.

For scraps, or small clippings, I use 8″ x 12″ sheets of manila paper and paste the scraps thereon, numbering the sheets of manila paper the same as the plates (omitting, of course, reference to city or architect).

Of course the classification, or index, is not perfect. Doubt will arise as to whether a house is a city house or a country house, for example, but the plate may easily be disposed of via the waste basket route, if a decision can not be reached, or the plate may be numbered in pencil, and the number changed whenever one changes his mind.

This method of filing gives good results if used judiciously, but I would suggest that a waste basket be made a part of the equipment, as the first impulse in using this method is to save and classify everything which comes to hand, the second impulse being to discard the whole business.

1\. ADMINISTRATIVE, GOVERNMENTAL, ETC.
.1 Capitols, Houses of Parliament, Legislative Buildings.
.2 Ministries of War, State, etc. Governmental Departments and Office Buildings.
.3 City and Town Halls.
.35 City Gates.
.38 City Plans.
.4 Custom Houses. Excise Offices.
.5 Court Houses.
.55 Registries of Deeds. Archive Buildings.
.6 Post Offices.
.63 Post Office and Custom House combined.
.66 Post Office and Court House combined.
.69 Post Office, Custom House, and Court House combined.
.7 Engine Houses. Fire Alarm Stations.
.8 Military, Protective, and Corrective.
.81 Barracks, Military Post Buildings.
.82 Armories. (See also 7.3, Riding Halls.)
.83 Arsenals.
.85 Police Stations.
.86 Penitentiaries. Jails.
.87 Reformatories for Adults.
.88 Reform Schools.
.9 Hospitals. Asylums.
.91 Sick and Wounded. Incurables, etc.
.92 Sanatoria.
.93 Insane. Feeble Minded. Inebriates.
.94 Blind. Deaf and Dumb. (See also 4.17 Day Schools for Defectives.)
.95 Almshouses.
.96 Aged. Convents, etc.
.97 Soldiers' Homes.
.98 Orphans. Children. Foundlings.

2\. MONUMENTS.
.1 Commemorative.
.2 Funerary.
.21 Monuments proper.
.22 Tombs. Mausoleums.
.23 Receiving Vaults.
.3 etc. (Numbers left blank or omitted may be filled in as occasion arises.)
.5 Exposition buildings.

3\. ECCLESIASTICAL AND RELIGIOUS.
.1 Chapels, small.
.2 Parish Churches.
.3 Cathedrals.
3.4 Synagogues.
.5 Parish Houses. Sunday School Buildings.
.6 Temples.

4\. EDUCATIONAL AND SCIENTIFIC.
.1 Day Schools.
.11 Kindergartens.
.12 Primary Schools.
.13 Grammar Schools.
.14 High Schools.
.15 Normal Schools.
.16 Manual Training Schools.
.17 Schools for Defectives. (See also 1.94, Asylums for the Blind, Deaf and Dumb.)
.2 Boarding Schools.
.3 Colleges. Universities.
.4 Professional and Technical Schools not connected with a University.
.41 Theology.

.42 Law.
.43 Medicine.
.44 Science, Engineering.
.45 Art.
.46 Music
.5 Indpendent Scientific Institutions. Laboratories. Observatories.
.6 Scientific Museums. Menageries.
.7 Art Museums. Galleries.
.8 Libraries.
.9 Learned Societies. (See also 5.11, City Clubs, non-residential.)
5. SOCIETY BUILDINGS.
.1 City Clubs.
.11 Non-residential. (See also 4.9, Learned Societies.)
.112 Athletic Clubs.
.115 Y. M. C. A.
.12 Residential.
.125 Y. M. C. A.
.2 Suburban Clubs.
.25 Y. M. C. A.
.3 Country Clubs.
.5 Lodge Buildings.
6. RESIDENTIAL.
.1 Hotels, etc.
.11 City Hotels.
.12 Country Hotels.
.15 Restaurants. Cafes. Saloons. Bars. Rathskellers.
.2 Apartments. Tenements. (See also 8.3, mixed store, office and apartment buildings.)
.3 Palaces and palatial private houses. Embassies, etc. (Detached.)
.4 City Houses in Block. (Anything with one party wall or more.)
.5 City Houses, not in block.
.6 Suburban Houses. Village Houses.
.7 Country Houses.
.75 Farm Houses.
.8 Cottages. Bungalows.
.9 Outbuildings. Dependencies.
.91 City.
.911 City Stables, private.
.912 Garages.
.92 Country.
.921 Gate and Porter's Lodges.
.922 Kitchens. Laundries. Dairies, etc.
.923 Stables. Kennels, etc.
.924 Carriage Houses. Garages.
.925 Barns. Granaries. Ice Houses. Silos, etc.
.926 Conservatories. Greenhouses.
.927 Windmills. Water Towers.
.928. Garden Houses, etc.
7. RECREATION AND AMUSEMENT.
.1 Theatres. Opera Houses.
.15 Moving Picture Theatres.
.2 Concert Halls. Lecture Halls.
.3 Rinks. Amphitheatres. Riding Halls and Schools. (See also 1.82, Armories.)
.4 Gmynasia. Turn Halls. Baseball Cages. (See also 5.115, 5.125, 5.25, Y. M. C. A.)
.5 Baths, swimming and otherwise. Locker Buildings.
.6 Buildings for watering places. Beach Bath Houses.
.7 Buildings for Parks.
.8 Boat Houses.
.9 Stadiums. Others.
8. BUSINESS AND COMMERCIAL.
.1 Markets.
.2 Stores, wholesale and retail.
.3 Mixed Store, Office and Apartment Buildings.
.31 Stores and Offices.
.32 Stores and Flats.
.33 Offices and Flats.
.34 Including Hall.
.4 Office Buildings.
.41 Low.
.42 High, steel construction.
.5 Banks. Trust Companies. Safe Deposit Vaults.
.55 Bank and Office.
.6 Exchanges.
9. TRANSPORTATION AND STORAGE.
.1 Railway Passenger Stations.
.11 Way Stations.
.111 City.
.112 Country.
.12 Terminal Stations.
.2 Street Railway Stations.
.21 Surface Stations.
.22 Elevated Stations.
.23 Subway Stations.
.3 Wharf and Dock Buildings.
.31 Ferry Houses. Buildings for Passengers. Imgrant Stations.
.32 Dock Buildings for freight, etc.
.4 Railway Freight Houses.
.5 Warehouses—Bonded, Storage, etc. Cold Storage,
.6 Grain Elevators. Coal and Ore Docks.
.7 Railway Round Houses. Car Barns, etc.
.71 Roundhouses.
.72 Car Barns.
.8 Signal Towers, etc.
.85 Lighthouses.
.9 Others.
10. FACTORIES, ETC.
.1 Mill construction buildings, for whatever use.
.2 Power Stations.
.3 Abattoirs.
.4 Laundries.
11. BRIDGES.
.1 Wood.
.2 Masonry, stone, brick, concrete, etc.
.3 Steel and Iron.
.31 Simple Truss.
.32 Cantilever.
.33 Arch.
.34 Suspension.

ARCHITECTURAL DETAILS

1—WALLS (Exterior)
1. Wooden.
11. Gables and Pediments.
12. Cornices and Friezes.
13. Arcades and Colonnades.
2. Plaster, Stucco, Half-Timber.
3. Concrete.
4. Brick.
5. Stone.
6. Terra Cotta.
7. Marble and Tile.
8.
9. Other.
2—COLUMNS, PIERS, PILASTERS (Sub. like 1)
3—WALLS AND WALL TREATMENT (Interior)
1. Wooden.
2. Paper, Plaster Boards, etc.
3. Plaster.
4. Marble and Tile.
5. Concrete.
6. Brick.
7. Stone.
8. Terra Cotta.
9. Other.
91. Painted Ornament; Fresco.
4—FLOORS AND FLOORING (Inc. Bases)
1. Wooden.
2. Concrete.
3. Composition.
4. Brick and Hollow Tile.
5. Stone.
6. Marble and Tile.
5—CEILINGS—(Inc. Cornices)
1. Wooden.
2. Paper, Plaster Board, etc.
3. Plaster.
4. Brick and Tile.
5. Stone.
6. Metal.
7.
8. Glass.
9. Other.
91. Painted Ornament; Fresco.
6—ROOFS
1. Wooden (Shingle, etc.)
2. Paper, Felt, Asbestos, etc.
3. Slate.
4. Brick, Stone, etc.
5. Concrete, Slag, Gravel.
6. Composition.
7. Tile, Terra Cotta.
8. Metal.
7—DOORS, WINDOWS, ETC.
1. Entrance Doorways.
11. Wood.
12. Plaster, Half-timber.
13. Concrete.
14. Brick.
15. Stone.
16. Tile.
17. Terra Cotta.
18. Metal.
2. Doors (exterior)
21. Wood.
22. Iron.
23. Bronze.
3. Doors (interior)
31. Wood.
32. Iron.
33. Bronze.
4. Windows (openings)
41. Wood.
42. Plaster, Half-timber.
43. Concrete.
44. Brick.
45. Stone.
46. Terra Cotta.
5. Windows.
51. Wooden.
52. Metal.
53.
54.
55. Leaded Glass, Art Glass.
6. Grilles.
7. Shutters, Blinds, Screens.
8—SKYLIGHTS, ROOF AND CEILING OPENINGS
9—STAIRWAYS; ELEVATORS
1. Stairways (exterior)
11. Wooden.
12. Masonry.
13. Metal.
2. Stairways (interior)
21. Wooden.
22. Marble, Tile.
23. Stone, Brick.
24. Iron.
25. Bronze.
3. Elevators and Enclosures
31. Iron.
32. Bronze.

4. Escalators.
10—MANTELS AND FIREPLACES
1. Wood.
2. Brick.
3. Stone.
4. Tile; Marble.
5. Terra Cotta.
6. Cement; Plaster.
11—OTHER INTERIOR
1. Fountains.
2. Memorial Tablets, etc.
3. Cupboards; Closets.
4.
5. Book cases.
6. Seats.
12—OTHER EXTERIOR
1. Porches, Verandas, Porte-Cocheres.
11. Wooden.
12. Brick.
13. Stone.
2. Fences; Gateways.
21. Wooden.
22. Brick.
23. Stone.
24. Terra Cotta.
25. Concrete.
26. Metal.
3. Pavements.
4.
5. Fountains; Pools.
6. Memorial Tablets, etc.
7. Seats.
13—MISCELLANEOUS ORNAMENT
1. Wood.
2. Plaster; Concrete.
3. Tile; Marble.
4. Brick.
5. Stone.
6. Terra Cotta.
7. Glass.
8. Metal.
81. Cast Iron.
82. Wrought Iron.
83. Brass.
84. Bronze.
9. Other.
91. Painted.

In addition, a "Miscellaneous" folder, for sculpture, paintings, murals, etc., not otherwise provided for.

COMPETITION FOR A COVER DESIGN.

A PRIZE of $500.00 will be awarded the winner of the competition for a cover design which is open to all artists, illustrators and designers in America. The book for which the winning cover design will be used will be entitled "Fifth Avenue, Old and New, 1824-1924," and will be issued by the Fifth Avenue Association at the time of the proposed Centennial Celebration in November. On the jury of award which is to judge the design are Charles Dana Gibson, Chairman of the Artist Members, F. D. Casey, Charles B. Falls, Harrison Fisher and Penrhyn Stanlaws; Melville E. Stone, Chairman of the Lay Members, Arthur Brisbane, John C. Martin, Frank A. Munsey, Ogden Reid and Herbert Bayard Swope. All entries must be received at the offices of the Fifth Avenue Association, New York City, not later than May 20th, 1924. Full information regarding the competition may be had by writing to the Fifth Avenue Association, 358 Fifth Avenue, New York.

FAREWELL LUNCHEON TO CHARLES V. RUEGER.

ON SATURDAY, March 29th, the office of Murgatroyd and Ogden held a luncheon in the private dining room of the newly completed Inter-Fraternity Club House, at 38th Street and Madison Avenue, to speed Mr. Charles V. Rueger on his journey to Seattle, where he expects to rusticate after two strenuous years in the big city. Mr. Ogden and Mr. Murgatroyd were present as well as Mr. Kenny, of the Allerton Company. In spite of the sadness of the occasion there was a subdued air of conviviality about the gathering. Mr. Rueger was finally allowed to depart after many warnings to look out for the horse-cars and after repeated promises on Mr. Rueger's part to send us a photo in his cowboy suit riding up and down Main Street. It is rumored that Mr. Rueger's well known weakness for the fair sex has something to do with his return to his native city, although several other dark reasons were hinted at during the course of the afternoon. The others present were Messrs. J. B. Fisher, Jr., Paul Zabriskie, J. J. "Timothy" Healy, Dave Martin, Stuart Paterson, and R. Banks Thomas, Sr. Mr. Ogden, from a hastily improvised rostrum consisting of a serving table, spoke a few words of appreciation as follows: "Mr. Rueger has a great deal of ability in geeting a lot into a small space." Mr. Rueger modestly admitted he had worked his way out of many a tight place.

THE LE BRUN SCHOLARSHIP

ON OTHER pages of this issue are reproduced drawings of the winning design and of the designs which were awarded mentions in the Le Brun Scholarship Competition. Below is printed the report of the jury.

The Le Brun Scholarship Committee during the two sessions held on March 21st and 22nd carefully considered the twenty-four sets of drawings submitted in the competition entitled "A Readjustment Centre for Military and Civilian Neuro-Psychiatric Cases To Be Erected As A War Memorial."

After eight hours of constant deliberation the following awards were decided upon:

The Prize to Drawing No. 6, submitted by Otto F. Cerny, Cicero, Illinois.

First Mention to Drawing No. 9, submitted by Robbins L. Conn, 101 Park Ave., New York.

Second Mention to Drawing No. 11, submitted by Charles J. Dornbusch, 2276 Hampden Pl., Bronx.

Third Mention to Drawing No. 38, submitted by Victor Pribil, 1319 Hatch Ave., Woodhaven, L. I.

The Committee was highly gratified at the high standard of ability and draftsmanship shown and the serious and conscientious study indicated in presenting the solutions of the problem.

It should be noted that conditions of the competition require that in making the award, the Jury are to give a full and careful consideration to the records of qualification filed by the competitors as well as to the comparative excellence of the drawings submitted.

The prize winning drawings showed a thorough appreciation of the requirements of the program, as written, as well as those portions of it purposely left by the Committee to be inferred.

The ability of this competitor was clearly apparent in his uniform presentation of a very irregular and picturesque solution in a simple and straightforward manner.

First Mention—The drawings awarded first mention had most of the qualities commended in those of the winner but had not quite the same freedom in plan. While the front portion of the group had all the qualities of a non-institutional and homelike nature, the rear and greater bulk of the building decidedly lacked this essential. The architecture, in a sense, was better than that of the winner and possibly more appropriate for our country, but an evidence of too much restraint was present throughout for a competition of this kind.

Second Mention—The author of this set of drawings is to be congratulated on his ability to present a project of such architectural merit. The program, however, demanded a solution of a more practical nature. While the building had all the charm of an Italian villa, a monumental quality and lack of intimacy seemed to be present, which the Committee could not reconcile with the program. This was even more evident in the plan which otherwise answered every requirement with certain few minor exceptions.

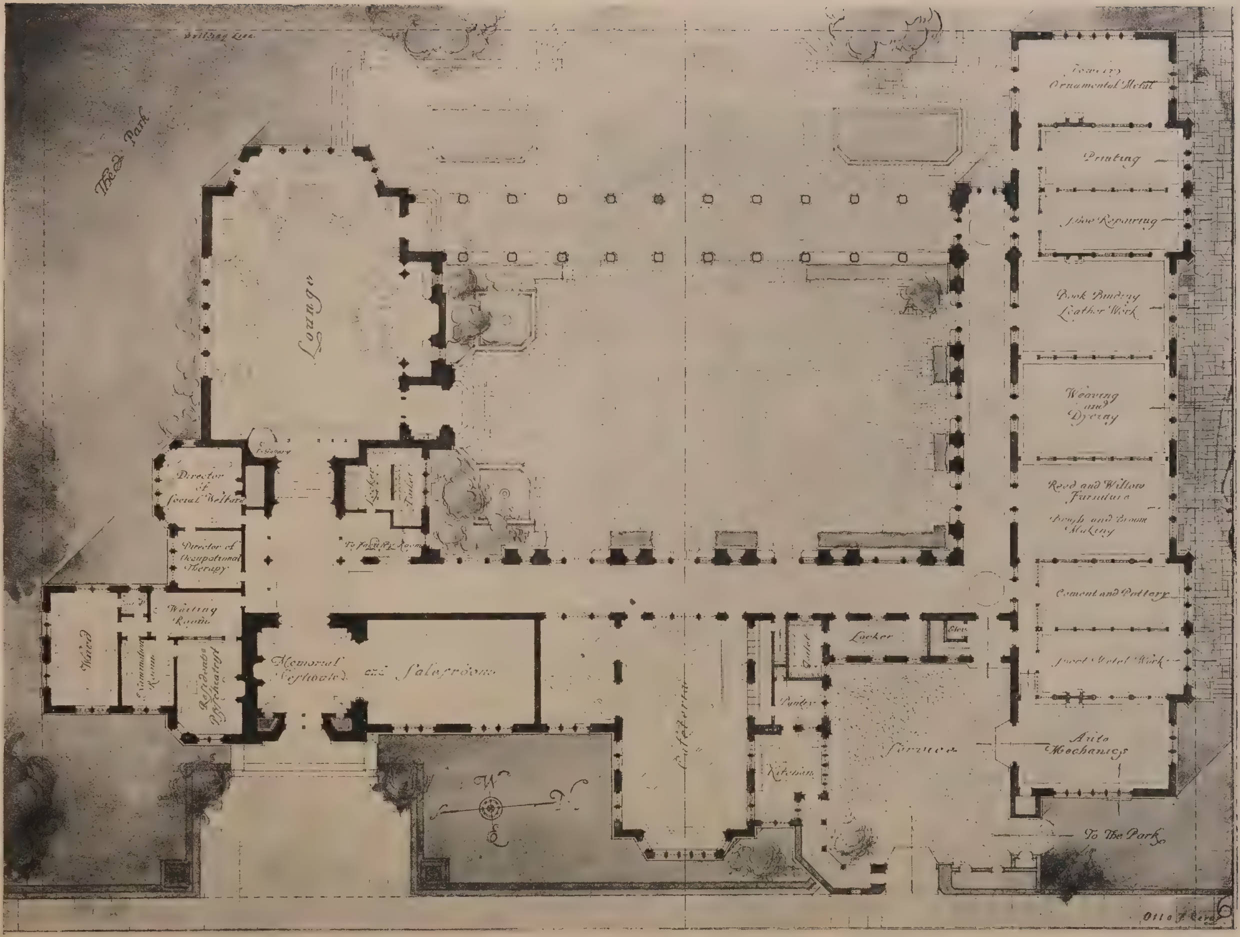
Third Mention—The drawings receiving third mention gave evidence of a most painstaking and possibly too laborious application on the part of the author, to such an extent that the major aspect of the problem seemed to have been lost sight of. The plan and section conveyed an entirely different idea of what the exterior might be. The author, however, is to be commended on this presentation of the exterior, especially on the perspective view which showed a charming and appropriate building. His future efforts should be directed towards solving his problems with more attention to a simple plan and presentation of same.

Charles E. Birge
Electus D. Litchfield
Grosvenor Atterbury
Otto R. Eggers
Milton B. Medary, Jr.
D. Everett Waid

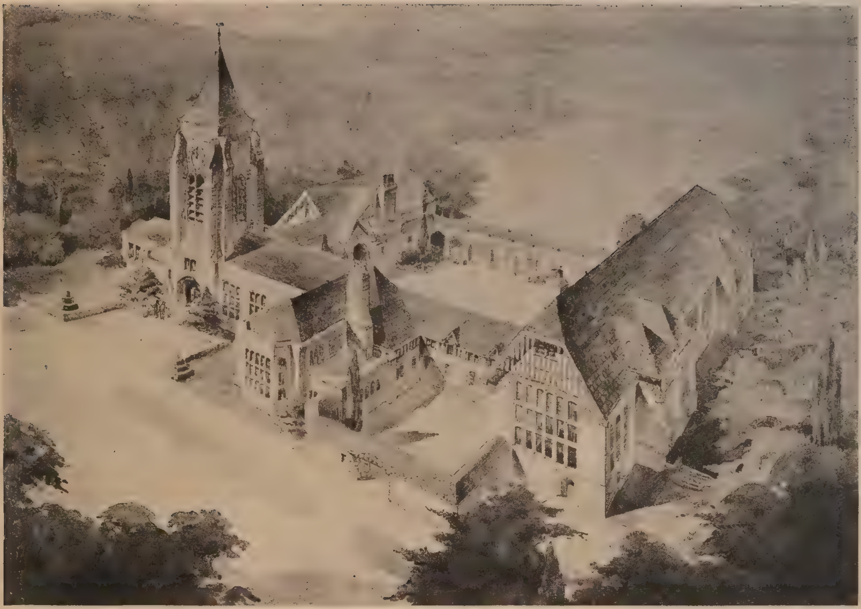
Jury.

Annual Dinner
of the
Architectural Bowling League
of New York
Pershing Square Savarin April 15th 1924

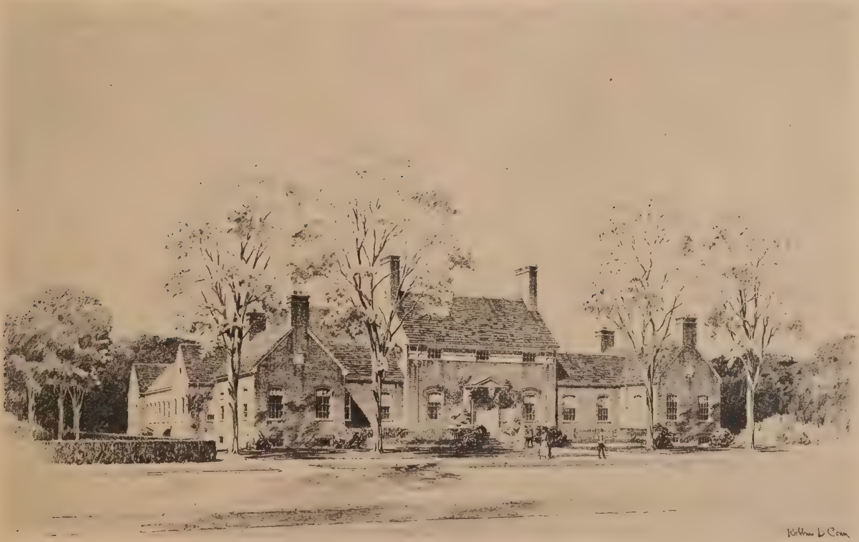
Annual Dinner of the Architectural Bowling League of New York, Café Savarin, Pershing Building.



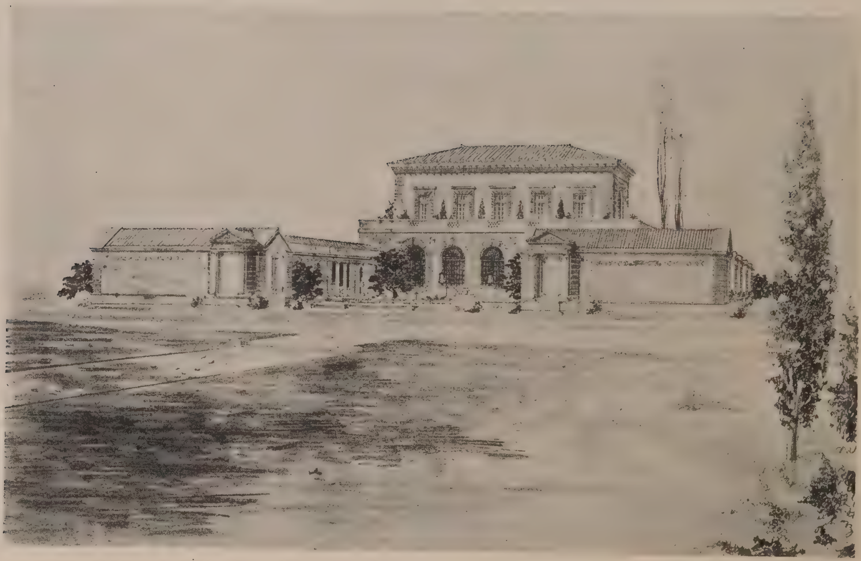
Plan of Winning Design in the Competition for the Le Brun Scholarship, 1924. By Otto F. Cerny.



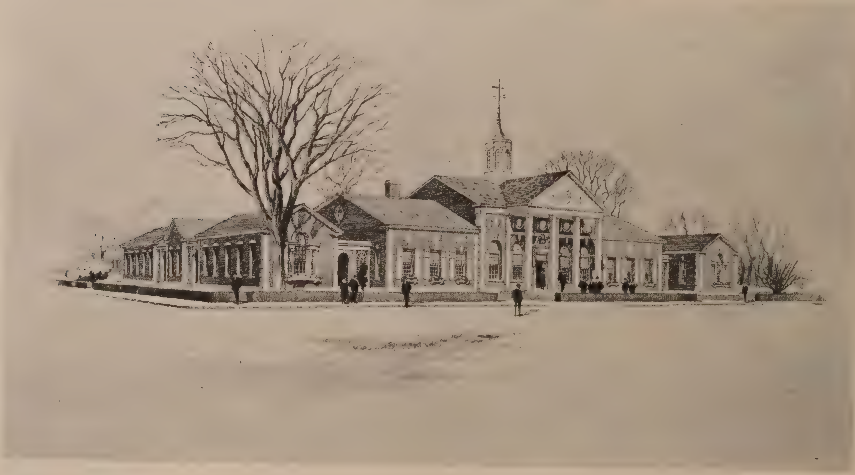
Winning Design in the Competition for the Le Brun Scholarship, 1924.
By Otto F. Cerny.



First Mention in the Competition for Le Brun Scholarship, 1924.
By Robbins L. Conn.



Second Mention in the Competition for the Le Brun Scholarship, 1924. By Charles H. Dornbusch.



Third Mention in the Competition for the Le Brun Scholarship, 1924. By Victor Pribil.

THE SPECIFICATION DESK

A Department for Specification Writers

MISCELLANEOUS ITEMS OF CONSTRUCTION PART XVIII.

By Otto Gaertner

In this series of notes Mr. Otto Gaertner, A.I.A., Associate Member American Society of Civil Engineers, is treating of a number of the minor matters of construction that are troublesome unless the architect happens to have met a similar problem previously—matters of a more or less special nature.—Ed.

Garages (*Continued*)—From this it will be seen that calcimine and white paint have lost about ten per cent of their original value while the enamels have practically retained their values. Calcimine loses its value on account of its porosity. Its porous surface permits it to absorb dirt readily and the surface is one that cannot be cleaned without doing the whole operation over again. It has been found that the ten per cent loss mentioned above occurs year after year, but with the enamels it was found that after the first few months no further loss was incurred. It can almost safely be said that with white paint or with calcimine used as an interior paint there is a progressive loss of light amounting to fifteen per cent of the light measured when the paint was applied. This is quite a high figure when carefully considered and entails considerable expense. For instance, suppose that a room about sixteen feet wide and twenty-five feet long so painted were initially lighted by four lamps of one hundred watts each. With a progressive loss as mentioned, at the end of two years one additional lamp of one hundred watts capacity would be needed. This represents a twenty-five per cent increase in the electric current consumption which when computed for the whole building in the larger garages greatly increases the running expenses.

Different colors have different coefficients of reflection, that is one color will reflect more light and absorb less than another. Also the smoothness of the surfaces effects the coefficient of reflection. This has an important bearing on both artificial and natural lighting. The amount of light reflected will also depend upon color of the incident light but we will assume that the common type of tungsten lamp is to be used. It is difficult to make a comparison of the reflecting values of colors comprehensible without actually supplying samples of the colors since the same name maybe applied to a color but when it is manufactured by one firm it may be lighter or darker and of a different shade from that supplied by another and have very different reflecting properties. The nature of the ingredients used in the paint and the manner of mixing them will have an effect upon the ability of the paint to reflect light. Even so small a difference as a higher or lower oil content of the paint will produce a slight variation.

This variation in some colors is considerable. In the grays for example, if the composition of the color is made of lamp black mixed with white paint it has a very low coefficient of reflection and is what is known as a cold gray. If, however, the gray is made by mixing red, yellow, and blue paint with a white base paint it has a much higher coefficient of reflections and is what is known as a warm gray. The following values are representative average values resulting from a large number of tests made by different authorities and are subject to variations depending upon the actual color and composition and finish of the paint that will be used in a building.

A flat white will have a coefficient of reflection of eighty-six per cent, an eggshell white will have a coefficient of eighty-four per cent, and a gloss white will have a coefficient of eighty-five per cent. More generally speaking, white when new shows values of from eighty-two to eighty-nine per cent, whereas white when old shows values of from seventy-five to eighty-five per cent.

The percentage of light reflected by other colors varies as follows: cream—sixty-two to eighty per cent; buff—forty-nine to sixty-six per cent; ivory—seventy-three to seventy-eight per cent; gray—seventeen to sixty-three per cent; light green—forty-eight to seventy-five per cent; dark green—eleven to twenty-five per cent; light blue—thirty-four to sixty-one per cent; pink—thirty-five to sixty-two per cent; dark red—thirteen to thirty-two per cent; yellow—sixty-one to seventy-seven per cent and dark tan—twenty-nine to forty-six per cent. Of course the more the above colors are lightened and the more they approach the white, the greater will be their coefficients of reflection.

From an illuminating point of view the gloss enamels are usually objectionable on account of the specular reflections of the light sources which annoy the eyes and confuse the objects between the eyes and the reflection. The flat enamels overcome this trouble and can easily be renovated. Also from an illuminating point of view the ceiling of a room is of more importance than the walls and should be kept bright and the walls a little less bright. The upper parts of the walls are of more importance than the lower parts and should be kept lighter or of the same color as the lower parts of the walls, except where the lower parts have dados of a dark color. The dados, as already mentioned should not be of a very dark color though they may be darker than the upper parts of the walls.

Light surroundings generally reduce the conditions of glare and light colored walls diffuse the light toward other parts of the room. When the light is reflected towards the sides of rooms with windows, it lessens the strong contrast which we sometimes get between the brightness outside and the inside walls beside the windows, the latter usually being in shadow and comparatively dark. The diffusion of the light also helps to make working at machinery in the repair departments easier and safer, especially if the machinery is also painted a light color. The shadows which generally occur at the punch presses, drills, lathes, et cetera, are reduced or eliminated so that moving parts are made visible and so that the metal which is being worked can more easily be watched and properly manipulated.

In the show rooms and offices the efficiency of the light utilization must often be disregarded in order to enhance the appearance of the room. The color schemes and selection of the fixtures must be left to the designer but it is well to bear in mind that a white ceiling will not change the color of the reflected light as is the case with a colored one. To have the light of the proper color may be important in the show room where the colors of the cars may be their greatest selling value.

White light when it strikes a colored surface will have some of its rays absorbed and will be reflected as colored rather than white light. Especially if indirect lighting is to be used, the ceiling surface should be light in color.

In the automobile storage rooms, and for the general lighting in work rooms the type of fixture commonly known as the dome reflector has been found very efficient. On account of the numerous thefts of lamps it is advisable to have lock-key sockets, that is a type of socket into which the lamps may be screwed but from which they may only be removed by the caretaker or person having a key. Another way, but not so pleasing to the eye, is to provide all the fixtures with a wire cage so that the lamps may not be so readily removed. If the person who wishes to remove the lamp must first open or remove the screen he may be discovered in time to prevent him from doing so. It may also discourage the attempt. It is well to put metal screens on all low hanging fixtures so as to prevent the lamps from being struck and broken by the workmen. For the same reason the fixtures themselves should be made of enameled metal as far as possible. Glass reflectors are too easily broken in a public garage and are often never replaced, thus affecting the efficiency of the lighting equipment. In general, clear tungsten lamps should not be placed in open reflectors unless they are placed rather high, say about eighteen to twenty feet. In a general garage storage or work room about twelve feet high a spacing of twelve feet on centers each way usually will give satisfactory results if the type of fixture, size of unit, et cetera, are worked out to suit.

PUBLICATIONS OF INTEREST TO THE SPECIFICATION WRITER.

Any publication mentioned under this heading will be sent free, unless otherwise noted, upon rqeuest, to readers of Pencil Points *by the firm issuing the publication. When writing for any of these items please mention* Pencil Points.

Timbrel Vault Construction.—Portfolio describing and illustrating Guastavino masonry construction suitable for churches and other buildings. Full page plates. Data on Akoustolith sound absorbing stone. Covers subject of modern acoustics. 10 x 13. R. Guastavino Co., 1133 Broadway, New York City.

International Casements.—Attractive booklet on subject of windows for homes of distinction and charm. Illustrations of excellent English and American domestic architecture, drawings and photographs, interiors and exteriors. 24 pp. 8 x 10. International Casement Co., Jamestown, N. Y.

Morene Brochure.—Illustrates and describes the mural treatment of the new Savarin Restaurant, Pershing Square Building, New York, together with illustrations of other installations. Specifications and complete data. 12 pp. 10 x 13. Morene Products Co., 245 West 28th Street, New York City.

Copper Flashings.—A handbook of data on the use of copper as a flashing material with standard details of construction and specifications for sheet copper work. 13 full page plates showing 71 different details. Much useful information applicable to buildings of all types. 8½ x 11. 66 pp. The Copper & Brass Research Assn., 25 Broadway New York.

Von Duprin Self-Releasing Fire Exit Devices.—A handbook on the subject. Illustrations of all types, sections and details. Complete instructions for specification and installation. Instructions for swinging doors. A very valuable book for every specification writer. 96 pp. 8½ x 11. Vonnegut Hardware Co., Indianapolis, Ind.

Pyrobar Roof Construction.—Complete data for the architect and draftsman; blue prints, detail drawings, showing application in industrial plants, school buildings, etc. Specifications. 8½ x 11. 48 pp. U. S. Gypsum Co., 205 West Monroe St., Chicago, Ill.

Published by the same firm, Pyrobar Partition and Furring Tile. Similar to the above covering subject indicated. 24 pp. 8½ x 11. Jester-Sacket System of Partitions and Ceilings. Blue prints and standard details, complete engineering and other necessary data. 24 pp. 8½ x 11.

Better Homes from Old Houses.—Brochure treating this important subject in an interesting way. More than 50 sketches by Louis Rosenberg covering usual types of alteration problems, together with floor plans, details, etc. 20 pp. 8½ x 11. The Barrett Co. 40 Rector St., New York City.

Through the Ages.—Monthly magazine devoted to the architectural use of marble. The March number illustrates bank interiors and also includes sketches and photographic reproductions of both foreign and domestic monumental work. The National Association of Marble Dealers, Rockefeller Bldg., Cleveland, Ohio.

Homes of Beauty.—Designs for a small brick house, 1924 Edition. A collection of designs for small houses submitted in competition. 70 pp. 8 x 11. American Face Brick Assn., 130 No. Wells St., Chicago, Ill.

Robbins Screens.—Booklet illustrated in color covering modern screening. Covers construction, hardware, materials, etc. 24 pp. 8½ x 11. Robbins Mfg. Co., 1815 No. Central Park West, Chicago, Ill.

Grinnell Adjustable Pipe Hangers.—Catalog No. 3 1924. Handbook on the subject of adjustable hangers for all types of service. Complete engineering and specification data. Handy pocket size, 4 x 9. 120 pp. Grinnell Company, Providence, R. I.

Steel Windows for Schools.—Brochure on the subject containing illustrations, details of construction, sections, installation details, etc. 32 pp. 8½ x 11. Detroit Steel Products Co., Detroit, Mich.

Fireplace and Flue Construction.—The Covert system, with diagrams, sections and details. Specialties. Also includes data on sidewalk doors and wind-proof scupper. 16 pp. 8½ x 11. The H. W. Covert Co., 137 East 46th St., New York City.

Build with Brick.—Booklet illustrated with color plates showing various textures and mortar joints. Fish Brick Sales Co. 25 West 45th St., New York City.

Published by the same firm, The Use of Brick for Interiors and Brick and the Landscape, Walls, Walks and Chimneys.

Bommer Spring Hinges.—Catalog No. 47 covers all types and models for all uses. Illustrated. Methods of application, door stops and other specialties. 40 pp. 7 x 10. The Bommer Spring Hinge Co., 263 Classon Ave., Brooklyn, N. Y.

The Uses of Mineral Wool in Architecture.—Covers subject of fire-proofing, sound-proofing, protection against insects, etc., sectional drawings and complete data. U. S. Mineral Wool Co., 280 Madison Ave., New York.

Shade Craft and Harmonious Decoration.—Booklet by Alice Burrell Irvine, illustrated in color, showing treatment of interiors with especial reference to windows. 16 pp. 6 x 9. Stewart, Hartshorn Co. 250 Fifth Ave., New York City.

Published by the same firm, Hartshorn Shade Rollers, booklet describing complete line, both wood and metal, also veranda and awning rollers, hardware specialties, etc. 36 pp.

Excessive Fuel Consumption.—Leaflet on the subject with reference to the heating system. C. A. Dunham Co., 230 East Ohio Street, Chicago, Ill.

Service Sheets.—Four service sheets showing details of gutters, flashings and roofing covering many different conditions. 15 x 18. American Zinc Inst., 27 Cedar St., New York City.

Data Sheets on Semi-Vitreous Solid Porcelain.—Folders describing enameled iron sanitary plumbing ware Roughing-in measurements and other useful data. Wheeling Sanitary Mfg. Co., Wheeling, West Va.

Cork Tile Floors.—Booklet illustrated in color showing application of this type of flooring for libraries, offices, art galleries, churches, etc. David E. Kennedy Co., Fiske Bldg., New York City.

Published by the same firm, Rubber Marble Flooring, similar to the above with color plates and other useful data.

Anti-Pluvius Puttyless Skylight.—Blueprint and specifications showing construction. Full size. 22 x 30. G. Drouve Co., Bridgeport, Conn.

Alliance Multi-Color Ruff-Face Brick.—Portfolio of color plates including fireplaces, panels, etc. Alliance Brick Co., 26 Review Bldg., Alliance, Ohio.

The New Era in School Ventilation.—Booklet on the subject with drawings, diagrams, etc. 16 pp. 7 x 10. Austral Window Co., 101 Park Ave., New York City.

Published by the same firm, Austral Window Hardware, catalog with details of construction covering both wood and metal windows. 32 pp. 8½ x 11.

Data Sheet.—Covers grading of window glass, explanation of qualities, thickness and other data required in writing specifications. American Window Glass Co., Farmers Bank Bldg., Pittsburgh, Pa.

Panel Boards for the Residence.—Bulletin No. 27. Contains complete wiring diagrams and specifications for the average modern residence. 16 pp. 7¾ x 10½. Frank Adam Electric Co., St. Louis, Mo.

Lally Columns.—Catalog, 8th Edition, 1924. Steel and concrete column construction. Diagrams, tables and much useful information. 70 pp. 8½ x 11. Lally Column Co., 334 Calyer St. Brooklyn, N. Y.

Sectionfold and Rolling Partitions.—New illustrated booklet, also covering subject of Hygienic School Wardrobes. Layouts, sections, details of construction, etc. 40 pp. 8½ x 11. J. G. Wilson Corp., 11 East 36th Street, New York City.

Doric and Gothic Brick.—Brochure in color showing artistic brick work. Chapter on the art of stippling. 32 pp. 6 x 9. Western Brick Co., Danville, Ill.

Published by the same firm, The Cloister Brick, brochure showing adaptability of this brick in the modern residence and apartment, schools and churches, public buildings, factories and warehouses. Color plates. 32 pp. 6 x 9.

Casement and Transom Hardware.—Leaflet describing "Whitco" Specialties as applied to casement sash, either wood, hollow metal or kalamein. H. E. Holbrook Co., Mass Trust Bldg., Boston, Mass.

Ruud Delineator.—A great convenience in the drafting room in securing proper perspective immediately. Ruud Mfg. Co., Pittsburgh, Pa.

Atlantic Terra Cotta.—Monthly magazine for architects and draftsmen. The March issue shows Greek Terra Cotta of the Fifth Century B. C. Also examples from Rome. Two plates showing modern examples and detail of construction. Atlantic Terra Cotta Co., 350 Madison Ave. New York City.

Overhead Sash Pulleys and Hardware Specialties.—Catalog No. 17. Booklet with specifications, detail drawings and complete data. 54 pages. 6 x 9. Grant Pulley & Hardware Co., 101 Park Ave., New York City.

Breinig Brothers Prepared Paint.—Color card with 24 samples. Similar in form to above Porch and Deck Paint, Wall Sheen, Metal Protective Paint and Satin Stain. Breinig Brothers, Hoboken, N. J.

Reading Wrought Iron Pipe.—Bulletin No. 1. Technical Treatise on the development of this material, methods of manufacture, service in public buildings and other important structures. 32 pp. 8½ x 11. Reading Iron Works, Reading, Pa.

Exterior Lighting Fixtures.—Catalog 4H. Profusely illustrated showing full range of exterior lighting fixtures for all requirements. Hundreds of designs. 96 pp. 8½ x 11. Smyser-Royer Co., Philadelphia, Pa.

The Pedestal Pile.—Complete description of this type of concrete pile. Drawings, diagrams installations, etc. MacArthur Concrete Pile and Foundation Co., 55 John St., New York City.

Portfolio of Waterproofing Information.—Portfolio of loose leaf data for architects and draftsmen containing much useful information on the subject. A. C. Horn Co., 900 Horn Bldg., L. I. City, New York.

Fireproof Veneered Doors and Trim.—A 16 page book. 8½ x 11. Containing full information and complete details and specifications relative to Pyrono Fireproof Veneered Doors and Trim, also Pyrono details in sheet form for tracing. The Compound & Pyrono Door Co., St. Joseph, Mich.

Specification Data Sheet.—Contains information regarding Ventilouvre a specially designed ventilator for use in doors and transom space. Full page drawing showing details. 8½ x 11. Ventilouvre Co., 103 Park Ave., New York.

Modern Floors.—Illustrated booklet on subject of flooring for hospitals, schools, banks, institutions and many other types of buildings. 24 pp. 7¾ x 10¾. Marine Decking & Flooring Co., Philadelphia, Pa.

Lighting Bulletin.—Booklet illustrated in color showing types of units for various uses. Tables, prices, chart for calculating illumination required. 8 x 10½. 30 pp. Edwin F. Guth Co., St. Louis, Mo.

Fences, Gates and Railings.—Manual No. 60, containing complete specifications, scale drawings, details and dimensions and much other useful data on the subject. Standard filing size and form. 8½ x 11. 94 pp. Anchor Post Iron Works, Hudson Terminal Building, New York.

Slate—Consider its Uses.—Attractive booklet showing the many architectural uses for slate. Roofs, walks, floors and many special uses are attractively set forth. 32 pp. National Slate Association 757 Drexel Bldg., Philadelphia, Pa.

Telescopic Hoists.—New catalog in two colors. Illustrated with photographs of installations for handling ash cans and other loads between floors. Specifications. 24 pp. 8½ x 11. Gillis & Geoghegan, 548 W. Broadway, New York City.

Structural Slate.—A series of bulletins prepared by the Structural Service Bureau dealing with the various uses of structural slate. Also a specification, with appended suggestions for preparatory work by other contractors, necessary to receive the slate. The Structural Slate Company, 130 Robinson Avenue, Pen Argyl, Pennsylvania.

Mueller Tile.—Illustrated brochure of faience and Flemish Tile. Fireplaces, swimming pools and many exterior applications. 6 x 9. 36 pp. Mueller Mosaic Co., Trenton, N. J.

Water Filters.—Bulletin No. 501 describing Graver horizontal pressure water filters. 8¼ x 11. 12 pp. The Graver Corp., East Chicago, Ind.

Sound Deadening.—Booklet covering subject of sound deadening and heat insulation in diagram, picture and text. Correct methods of construction for many varied uses. Standard A.I.A. filing size. 7½ x 10½. 28 pp. Samuel Cabot, Inc., 141 Milk St., Boston, Mass.

Chains. Catalog A. 1.—Describing a complete line of sash chains, cable chains and various specialties and fixtures useful in modern building construction. Tables and other useful data. 24 pp. 6 x 9. The Smith & Egge Mfg. Co., Bridgeport, Conn.

Corrugated Wire Glass.—Illustrated technical bulletin No. 8 covering the application of wire glass in various types of construction. Twenty full-page drawings of details with specification data. 8½ x 11. 44 pp. Pennsylvania Wire Glass Co., Pennsylvania Bldg., Philadelphia, Pa.

Rookwood Pottery.—Loose-leaf portfolio showing applications of Rookwood tile to various types of rooms in different classes of buildings. 9 x 12. 60 plates. Rookwood Pottery Co., Cincinnati, Ohio.

Water Mixing Valves.—Illustrated handbook showing thermostatic water mixing valves for showers and a variety of other uses. Diagrams and complete specification data. 32 pp. 7½ x 10½. Leonard-Rooke Co., Providence, R. I.

Greenhouses of Quality.—Illustrated booklet with large sheet showing details on subject of modern greenhouse construction. 8½ x 11. W. H. Lutton Co. 222 Kearney Ave., Jersey City, N. J.

Full Size Details.—Series No. 4 shows single, twin and triple windows, revolving windows, casements, rolling partitions, etc. 15 full size black prints, 22 x 28. Grant Pulley and Hardware Co., 101 Park Ave., New York City.

Plumbing Fixture Handbook.—Loose-leaf book with flexible binding. Complete data on Eljer Vitreous line. Sections and complete specification data. 4½ x 7. 116 pp. Eljer Co., Ford City, Pa.

Gurney Boilers and Radiators.—Catalog 36. Heating handbook with much general information of value to the specification writer. 128 pp. 4½ x 7. Gurney Heater Mfg. Co., 93 Oliver St., Boston, Mass.

Appalachian Tennessee Marble.—Loose-leaf portfolio containing color plates, data as to standard sizes, specifications for various types of marble work, etc. 8½ x 11. Appalachian Marble Co., Knoxville, Tenn.

Chinook Heaters—Bulletin No. 24.—Technical data on heating of value to specification writers. Application to various types of buildings, layouts, diagrams, and many pages of detail drawings. 88 pp. 8 x 11. Bayley Mfg. Co., Milwaukee, Wis.

M. C. K. Safety Locks.—Booklet on subject of safety locks for elevators. 30 pp. 4 x 9. Elevator Locks Co., Peoria, Ill.

Apartment House Telephone Systems, Bulletin 607.—Covers subject completely with illustrations of various types suitable for different conditions. Layouts and complete data. 40 pp. 8 x 10. Federal Telephone & Telegraph Co., Buffalo, N. Y.

Multi-Syphon Ventilators.—Portfolio of data on ventilators. Standard filing size. 8½ x 11. American Cornice Works Co., 237 No. Water St., Wichita, Kansas.

Ruud Water Heaters.—Loose-leaf specification portfolio giving complete information on the subject. Large layout sheets, complete instructions for installing, sections, details, specifications, etc. 8½ x 11. Rudd Mfg. Co., Pittsburgh, Pa.

Handbook of Fireproof Construction.—2nd revised edition. Standard construction details, tables of safe loads, etc. 40 pp. 8½ x 11. Concrete Engineering Co., Omaha, Neb.

The Kernerator.—Covers disposal of rubbish and other waste in residence and apartment buildings. 40 pp. 6 x 9. The Kerner Incinerator Co., Clinton Street, Milwaukee, Wis.

Published by the same firm. The Sanitary Disposal of Waste in Hospitals, also Blue Prints with Complete Instructions as to layouts for all types of buildings.

Rolling and Folding Doors and Shutters.—Catalog No. 51. Complete catalog profusely illustrated covering all types of equipment for various uses. 136 pp. 8 x 11. The Kinnear Mfg. Co., Columbus, Ohio.

Difficult Additions in One-Fourth the Time.—Folder showing the Quixsum, a device for the addition of linear feet and inches and common fractions. Shows methods of operation, sample problems, etc. Especially designed for architects, engineers and draftsmen. Precision Adding Machine Co., Gotham Bank Bldg., New York City.

Bradford Brick and Tile.—Loose-leaf portfolio containing many color plates. Bonds and mortar joints clearly shown. 32 pp. 8½ x 11. Bradford Brick & Tile Co., Bradford, Pa.

Pipeless Heating System.—Booklet telling complete story of this inexpensive and efficient type of equipment. Sectional drawings, layouts, etc. 12 pp. 9 x 12. The Beckwith Co., Dowagic, Mich.

Published by the same firm. Moistair, treatise on heating the moderate size house. 20 pp. 9 x 12.

Dengar Lighting Units.—Catalog D-7. Fully describes and shows application of this modern type of lighting unit, suitable for many types of buildings. 30 pp. 8 x 11. Beardslee Chandelier Mfg. Co., 216 So. Jefferson St., Chicago, Ill.

Bloxonend Flooring.—Specification as recommended by A.I.A. Loose-leaf portfolio containing complete information for applying this flooring to warehouses, factories and other conditions requiring great durability. Standard filing size. 8½ x 11. Carter Bloxonend Flooring Co., Kansas City, Mo.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912,

Of Pencil Points, published monthly at Stamford, Conn., for April 1st, 1924.

State of New York, }
County of New York, } ss.,

Before me, a Notary Public, in and for the State and county aforesaid, personally appeared W. V. Montgomery, who having been duly sworn according to law, deposes and says that he is the Business Manager of the corporation publishing Pencil Points, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 443, Postal Laws and Regulations, printed on the reverse of this form to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are:

Name of *Post office address*

Publisher, The Pencil Points Press, Inc., 19 East 24th St., N. Y. City.

Editor, Eugene Clute, 19 East 24th St., N. Y. City.

Managing Editor, None.

Business Manager, W. V. Montgomery, 19 East 24th St., N. Y. City.

2. That the owners are: (Give names and addresses of individual owners, or, if a corporation, give its name and the names and addresses of stockholders owning or holding 1 per cent. or more of the total amount of stock.)

The Pencil Points Press, Inc., 19 East 24th St., N. Y. City.
Ralph Reinhold, 19 East 24th St., N. Y. City.
F. W. Robinson, 19 East 24th St., N. Y. City.
E. G. Nellis, 19 East 24th St., N. Y. City.
Marion S. Carpenter, 920 Fifth Avenue, N. Y. City.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent. or more of total amount of bonds, mortgages, or other securities are: (If there are none, so state.) None.

4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

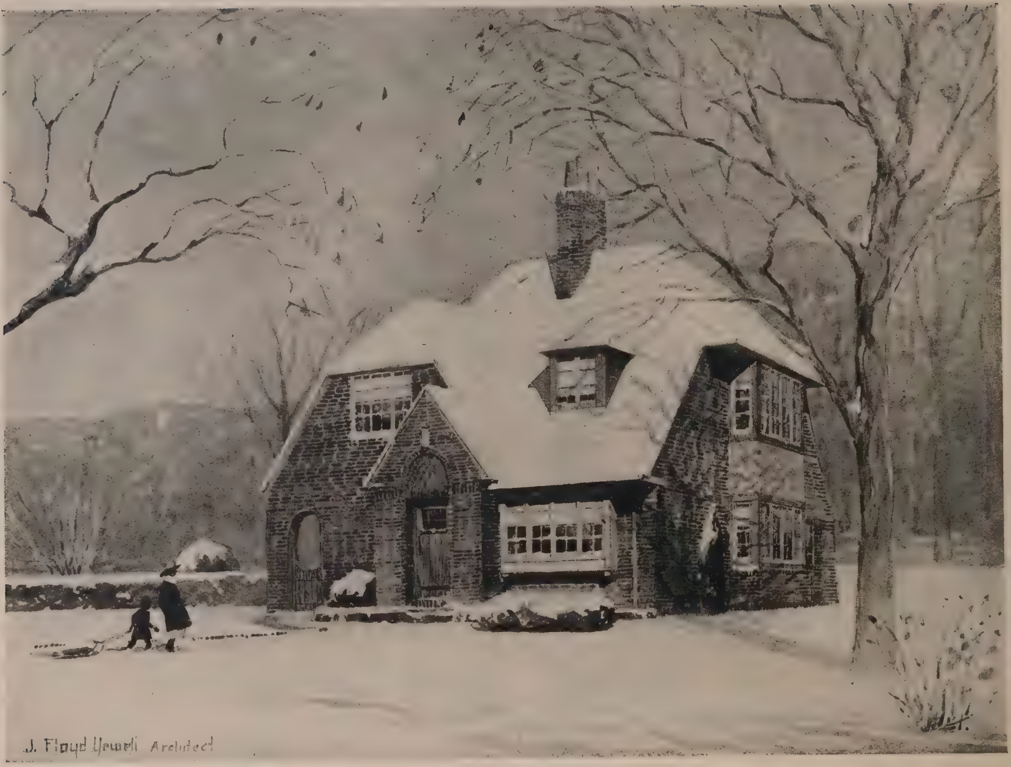
5. That the average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the six months preceding the date shown above is................ (This information is required from daily publications only.)

W. V. Montgomery,
Business Manager.

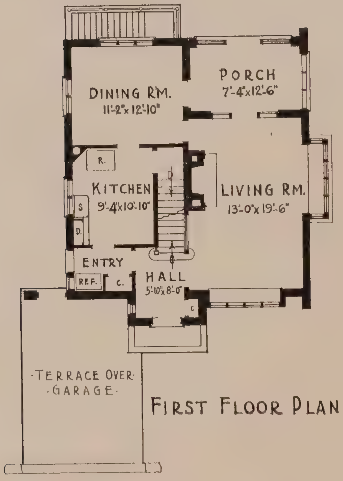
Sworn to and subscribed before me this seventh day of March, 1924.

[Seal.]

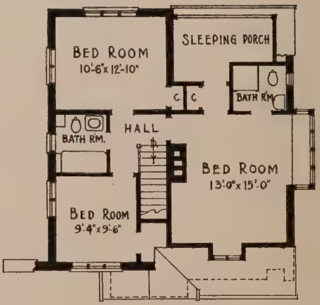
G. H. Sykes,
Notary Public.
My commission expires March 30, 1924



Rendering in Water Color by J. Floyd Yewell.

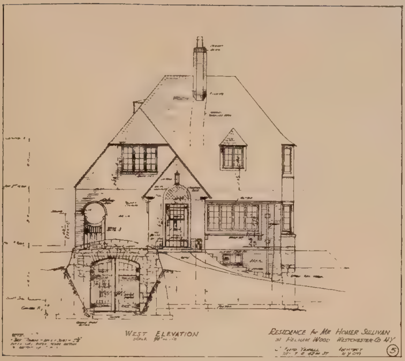


FIRST FLOOR PLAN

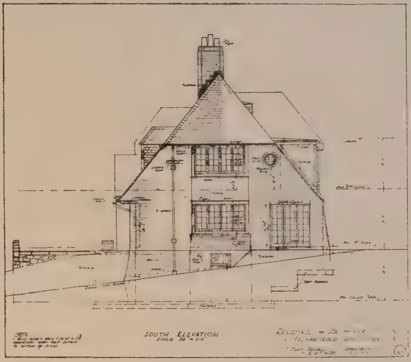


SECOND FLOOR PLAN

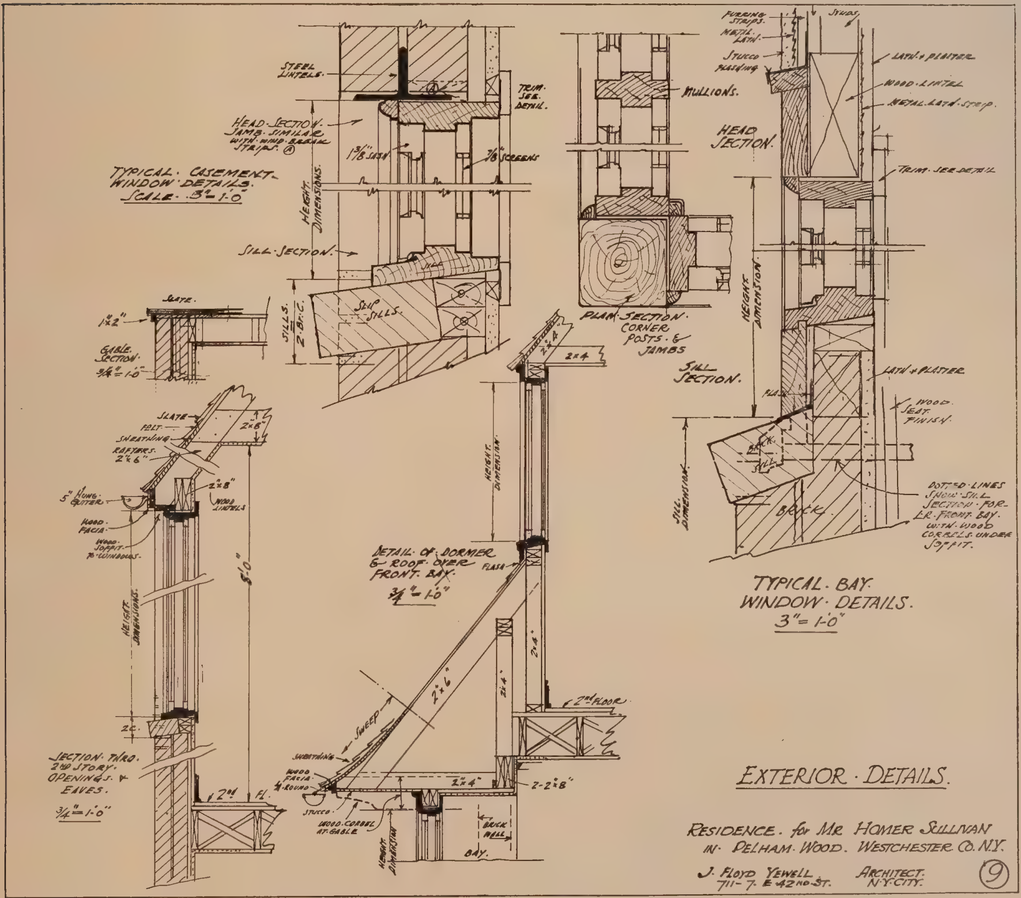
House for Mr. Homer Sullivan, in Pelham Wood, Westchester County, N. Y.
J. Floyd Yewell, Architect.


WEST ELEVATION
RESIDENCE for MR HOMER SULLIVAN
IN PELHAM WOOD WESTCHESTER CO. N.Y.
J. FLOYD YEWELL
ARCHITECT
5

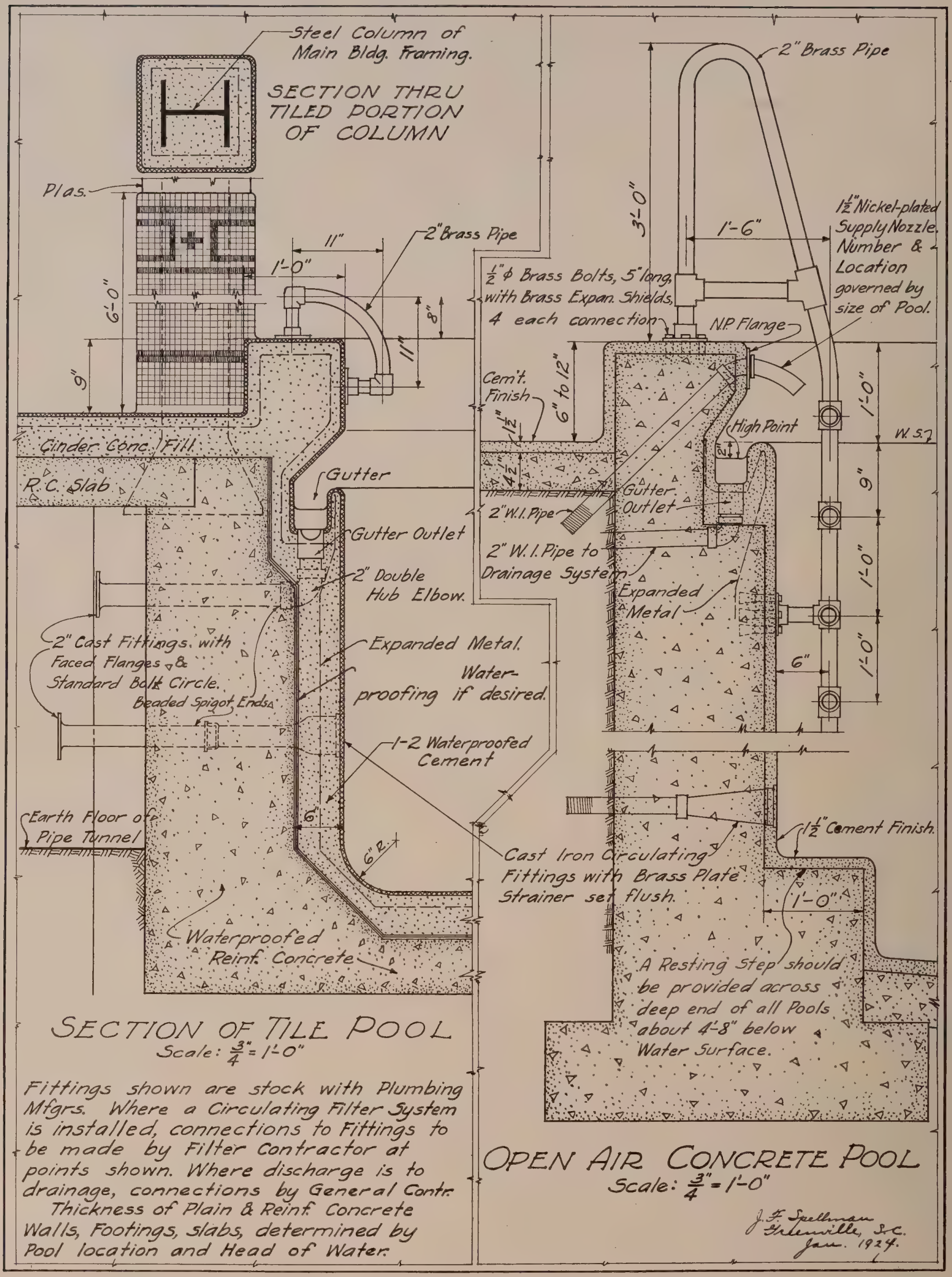
West Elevation.



South Elevation.



House for Mr. Homer Sullivan in Pelham Wood, Westchester County, N. Y.
J. Floyd Yewell, Architect.


Steel Column of Main Bldg. Framing.
SECTION THRU TILED PORTION OF COLUMN
Plas.
6'-0"
9"
11"
1'-0"
2" Brass Pipe
8"
11"
Cinder Conc. Fill
R.C. Slab
Gutter
Gutter Outlet
2" Double Hub Elbow.
Expanded Metal.
Water-proofing if desired.
1-2 Waterproofed Cement
2" Cast Fittings with Faced Flanges & Standard Bolt Circle.
Beaded Spigot Ends
Earth Floor of Pipe Tunnel
6"
6" R.
Waterproofed Reinf. Concrete
Cast Iron Circulating Fittings with Brass Plate Strainer set flush.
2" Brass Pipe
3'-0"
1'-6"
1½" Nickel-plated Supply Nozzle. Number & Location governed by size of Pool.
½" ϕ Brass Bolts, 5" long, with Brass Expan. Shields, 4 each connection
N.P. Flange
Cem't. Finish
6" to 12"
1½"
4½"
High Point
2"
W. S.
2" W. I. Pipe
Gutter Outlet
2" W. I. Pipe to Drainage System
Expanded Metal
1'-0"
9"
1'-0"
1'-0"
6"
1½" Cement Finish.
1'-0"
A Resting Step should be provided across deep end of all Pools about 4'-8" below Water Surface.

SECTION OF TILE POOL
Scale: $\frac{3}{4}$" = 1'-0"

Fittings shown are stock with Plumbing Mfgrs. Where a Circulating Filter System is installed, connections to Fittings to be made by Filter Contractor at points shown. Where discharge is to drainage, connections by General Contr.

Thickness of Plain & Reinf. Concrete Walls, Footings, slabs, determined by Pool location and Head of Water.

OPEN AIR CONCRETE POOL
Scale: $\frac{3}{4}$" = 1'-0"

J. F. Spellman
Greenville, S.C.
Jan. 1924.

Details of Construction—Section of Tile Pool and Open Air Concrete Pool.
By J. F. Spellman.

PENCIL POINTS
VOLUME V JUNE 1924 NUMBER 6

THE STUDENT IN THE OFFICE

THE problem of assimilating the students graduated each year from the schools of architecture and making them a part of the body of men engaged in architectural work is one that forces itself upon both the student and the practicing architect with unfailing regularity. It is perennial and its solution is of as great importance to the architect as it is to the student. For without a supply of men who have received a preliminary training the offices would be handicapped with the burden of the work done by the schools; architects today would be under the necessity of training men by the old system of office training, practically of apprenticeship. That the student is a valuable factor in the conduct of the practice of architecture is unquestionable. That he is worth little upon his entry into an office or for a considerable time thereafter is generally regarded as an accepted fact. But the efforts made by the schools have resulted in fitting men much better to take their places in the office than was formerly the case. The fact remains that the graduate is neither a finished product nor raw material.

But, getting right down to brass tacks, the profession cannot afford to lose any considerable number of these trained men and many of these men must earn a living upon graduation. On the one hand it may be said truly enough that these men do not produce enough in actual work at first to warrant paying them what they seem to need, that they should regard the first part of their time in an office as a continuation of their schooling and should not expect maintenance. On the other hand it may be said with equal truth that these men develop rapidly and that their ability to turn out good work after they have had some office experience usually makes it well worth while to take a loss on them for a time.

The student's point of view is stated in a letter published on another page of this issue under the title "An Appeal to Architects." This letter is printed for the purpose of drawing special attention to the problem of assimilating the student into the working organization, and particularly to the financial side of this problem. We hope that the publication of this letter will start a discussion in these pages that will bring out some helpful ideas on this subject. We want to print letters from architects and students, and from draftsmen who were themselves graduates not so long ago. We want to know how some of the men who have recently been assimilated met their problems. Let us hear from you.

A. I. A. ELECTS OFFICERS

THE following officers have been elected by the American Institute of Architects:

President, D. Everett Waid, New York, N. Y.; First Vice-President, Ellis F. Lawrence, Portland, Ore.; Second Vice-President, Abram Garfield, Cleveland, Ohio; Secretary, Edwin H. Brown, Minneapolis, Minn.; Treasurer, W. B. Ittner, St. Louis, Mo.; Executive Secretary, E. C. Kemper, Washington, D. C.

Board of Directors

For One Year (1924-1925)

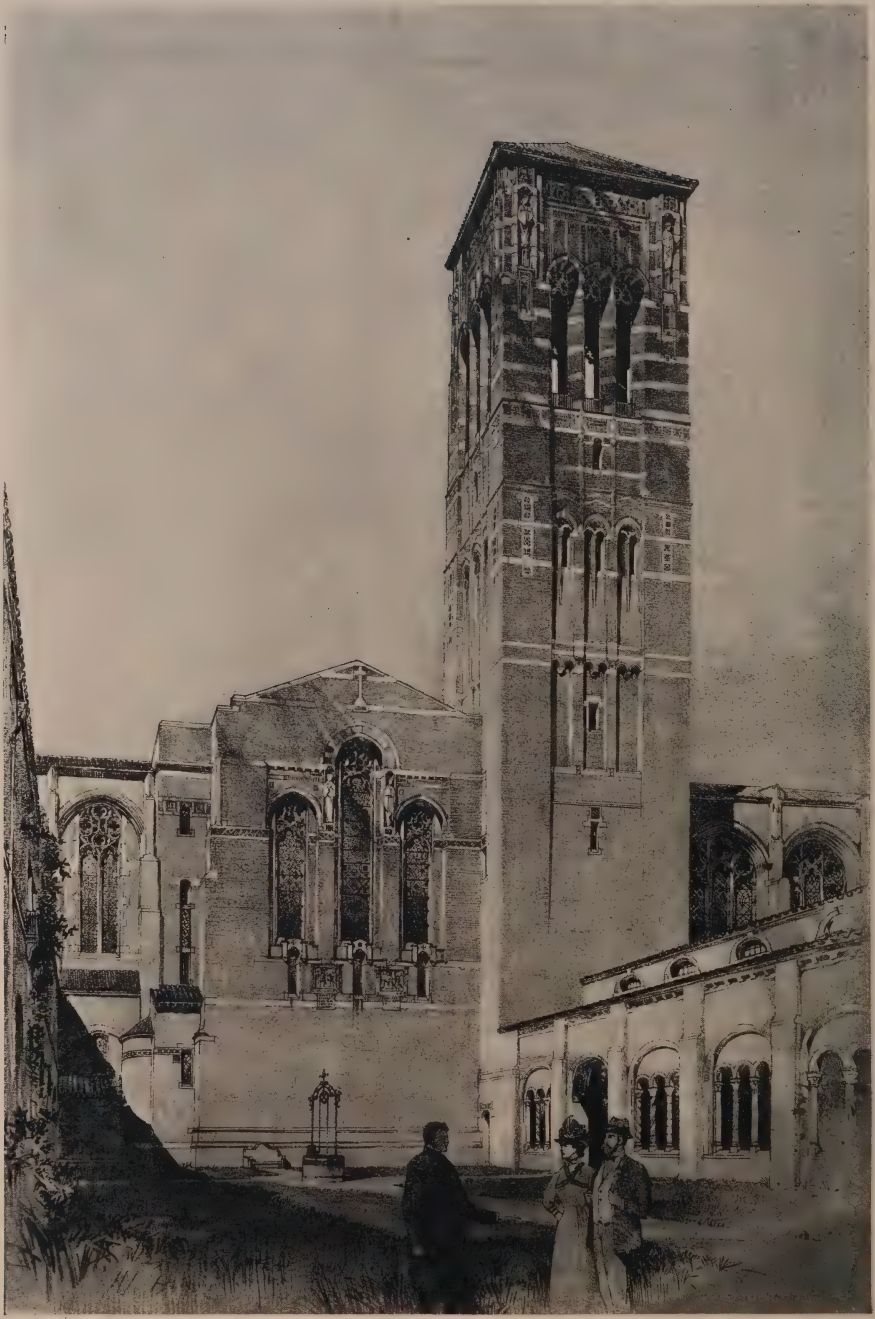
William Emerson (First Dist.), 491 Boylston St., Boston, Mass.; Benjamin W. Morris (Second Dist.), 101 Park Ave., New York, N. Y.; Wm. L. Steele (Sixth Dist.), 502 United Bank Bldg., Sioux City, Iowa. For Two Years (1924-1926).

Wm. E. Fisher (Eighth Dist.), 731 U. S. Nat. Bank Bldg., Denver, Col.; C. H. Hammond (Fifth Dist.), 1112 Steinway Hall, Chicago, Ill.; C. C. Zantzinger (Third Dist.), 112 So. 16th St., Philadelphia, Pa. For Three Years (1924-1927).

S. Schnaittacher (Ninth Dist.), 233 Post St., San Francisco, Cal.; W. J. Sayward (Seventh Dist.), Chamber of Commerce Bldg., Atlanta, Georgia; N. G. Walker (Fourth Dist.), Rock Hill, S. C.

IS YOUR BOOK DEALER LISTED?

WHERE Pencil Points Books can be bought is shown in the list covering several pages in this issue. This list is large but we want it to be representative of the whole country. If this list does not contain the name of a dealer in your city, won't you please send us the name of your book dealer? We want Pencil Points Books to be obtainable at the shops of local dealers everywhere. We want you to see each new Pencil Points Book as soon as it is issued and to become acquainted with the ones you do not happen to have seen. Let your book dealer show you. We want the same hearty cooperation on the part of our readers in this development of our plans that has helped so greatly in our effort to give to our readers a constantly bigger and better magazine and to make available for all some of the best old architectural documents as rapidly as possible. Let's get together on this plan too and bring it to completion in jig-time.



Drawing by Bertram Grosvenor Goodhue. The South Transept and Campanile, Proposed Cathedral, Los Angeles, Cal. Cram, Goodhue & Ferguson, Architects.

BERTRAM GROSVENOR GOODHUE

ARCHITECT, DESIGNER AND DRAFTSMAN

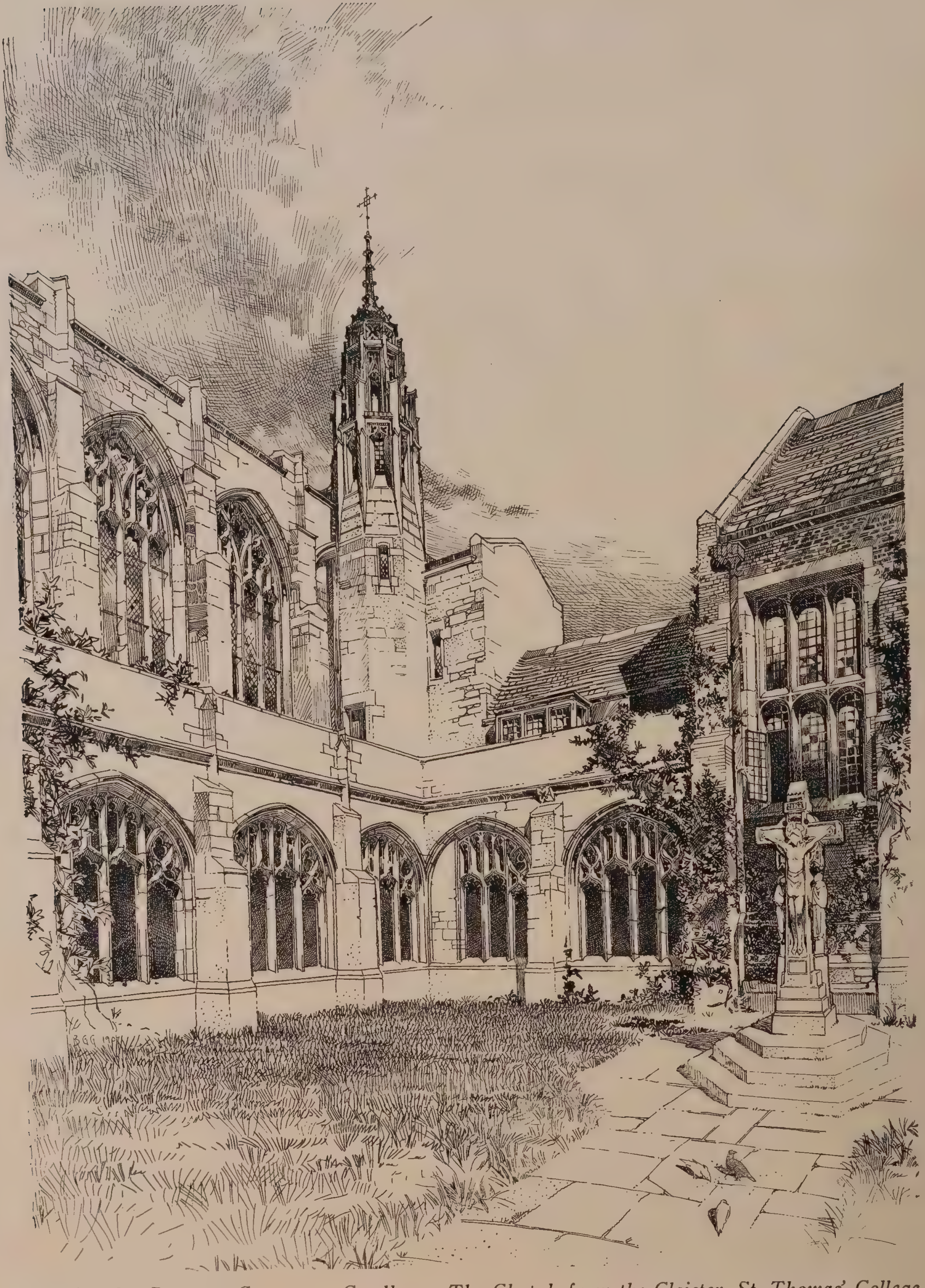
1869-1924

TO THE many architects and architectural students throughout the country who have found themselves interested in the unusual powers unfolded in each successive work of Mr. Goodhue, the shock of his untimely death has been accompanied by something of the sorrow felt by his personal friends. At the height of a distinguished career, with an important program of large work definitely in hand, with an unabated enthusiasm which has characterized his work from its earliest beginnings, he seemed but on the threshold of crowning success to his many years of diligent studentship and artistic effort. He has, of course, left behind him an enviable record of lasting memorials to his talent and, his work of the past few years especially gave promise of greater things which he might yet do.

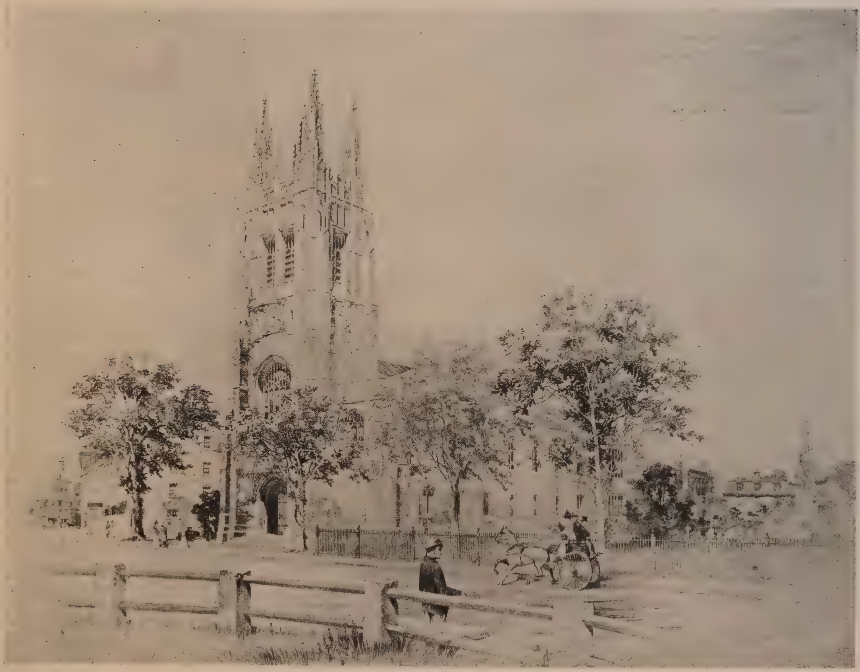
Bertram Grosvenor Goodhue

His influence in American architecture is one that will be missed, for he was an able protagonist of the architect, as artist and master workman, from the office drudge or apprentice, rather than the product of the forced development of the more or less interested student in the school.

Goodhue "grew-up" in the office of Renwick, Aspinwall and Russell, in New York, and although his work there showed talent, it was not until he became junior member of the firm of Cram, Wentworth and Goodhue of Boston, that his personal way of seeing and drawing things arrested much attention. Then, during about twenty years, his development went on, dominated by the very pro-English Gothic leanings of Mr. Cram, but with Goodhue making his influence more and more felt as the years went by. After the firm of Cram, Goodhue and Ferguson won the competition for the rebuilding of West Point Military Academy in 1903 and the New York office of the firm came into being, there seems to have developed a frank rivalry for leadership in design between two members of the firm, Mr. Cram and Mr. Goodhue. The scholarly character of Cram's designing, founded on the best old English Gothic, gave way more and more to Goodhue's instinct to follow the modern English masters of the style, who were by the character of their work the followers of the pre-Raphaelite cult among the painters. The movement sought to revive craftsmanship, and the extension of art work to every nook and cranny of endeavor—in a sense to combat the machine. It attempted to call upon Time to retrace his steps and to go back to conditions that would make for more beauty in life. The Church alone was a power likely to regard such movement with favor. Other interests would look on with comparative, if not whole, indifference. During a score of years Goodhue followed the pre-Raphaelite influence—practically the whole period of his association with Mr. Cram—and the study of the work of William Morris and Burne Jones was as evident as his decorative essays — drawings of page borders, magazine covers, typographical matter, etc.—as was that of John D. Sedding, Henry Wilson and G. F. Bodley in his architectural studies. But in the design of St. Thomas' Church, New York, by Cram, Goodhue & Ferguson, is asserted a broader influence and a pronounced French character is evident in the façade. Not the least significant influence was that of younger men growing up under his guidance and showing personality through the study of features of the design. E. Donald Robb and Francis Mayers were names of young men that I learned were responsible for interesting developments in his "organization"—which means his professional family much as French students and office assistants become to their *patrons*. Loyalty and esteem were reciprocated by Goodhue and the men of his office and the good fellowship that ensued is well de-



Drawing by Bertram Grosvenor Goodhue, The Chapel, from the Cloister, St. Thomas' College, Washington, D. C. Cram, Goodhue & Ferguson, Architects.



Design for the Meeting House of the First Parish, Cambridge, Mass.
Cram, Goodhue & Ferguson, Architects.

picted in an article entitled "Twelfth Night in Mr. Goodhue'sOffice," which appeared in the February 1922, number of Pencil Points. In the report of Mr. Goodhue's address contained in that article is the reflection of Goodhue's generous spirit of giving credit wherever due; of his recognition of the necessity of "the human element" in the office, in order to accomplish his purpose of producing architecture—for he was much more interested in architecture as a subject for study and enjoyment and expression than as the means for making a so-called business success. A good insight into his aims and spirit is contained in that address which will bear quoting at this time: "Our theory of life," he said, "goes somewhat beyond the Declaration of Independence; for we believe that everybody is entitled to 'life, liberty and',—not the 'pursuit of happiness'—but the actual possession of happiness itself. So we do not take every commission that offers. (My manager will tell you this with tears in his eyes.) We take only those that promise success and happiness. Success for the building, satisfaction and consequent happiness, secondarily, of course, for the client, but primarily for ourselves. This office is not run wholly as a business." . . . . .

"I can't begin to tell you how fond I am of every member of the office force,—how much I value them all and their various abilities. Of this force I am but one, a man-in-a-blouse, so to speak, with this *difference;* that *I have the power of veto.* I believe it makes for happiness that men's work should be interesting and not always mere work, like that ruled by an 'efficiency' fanatic—therefore, it's perfectly well understood that anybody can look at books, smoke, talk and sing—*especially* the latter." . . . . . . "And everybody is free to differ with me in my solution of any given problem (mind you, I always possess the veto power), so that setting a man a job and then going away for a morning, a day, or even longer, I often come back to find my own solution drawn out, with another and distinctly better one, alongside.

"Only occasionally, as, for instance, in the reredos of St. Thomas' Church, has it been possible to put the names of men actually engaged on a given piece of work thereto; but I should like to do this always."

He presented to several of his assistants copies of a medal made in his honor by Mr. Lee Lawrie, the sculptor who has collaborated with him and his assistant architects on practically all of their work —to Mr. Francis L. S. Mayers and Stephen King, whose managerial assistance seemed to him of outstanding value, and to others, preceding the presentation with the following comments quoted in brief: "Long ago I established a rule (it's perhaps a principle by now) that there should be no head draftsman in this office. Nor has there been, nor is there now; but it is true that on four men I depend for the carrying out of the work ably and well, at least so ably and well as to make me realize that I can go to California, or Europe, or hunting in Canada, or anywhere else with the positive knowledge that when I come back things will have gone *better* than if I had been here" . . . . .

The four men whom he mentioned are Ernest Jago, of whom he said, "All I need to tell you is that when you look at the reredos in St. Thomas' Church—on its architectural side, that is, for the sculptor was, as a matter of course, Mr. Lawrie, you look almost wholly upon his work."

Mr. O. H. Murray, of whom Mr. Goodhue states: "He is chiefly responsible for a great English house in Locust Valley"......"and if it is ever built, he can be credited with the chapel for the University of Chicago, a large church that is, perhaps, the most advanced and monumental piece of Gothic design that has ever come from here. Mr. Murray is reliable at every possible point, a master of every problem of design and has never failed me, even in my utmost need."

"Mr. Hardie Phillip........graduated from the office of Sir Robert Lorimer, one of the four or five architects in the world who really understand Gothic......... Mr. Phillip can jump from the highest sort of Gothic high churchmanship (he is chiefly responsible for the Church of St. Vincent Ferrer) to the most baroque of Mexican 'greaser' styles, without batting an eye and with no change in the quality of his work, which in my opinion is always the highest."

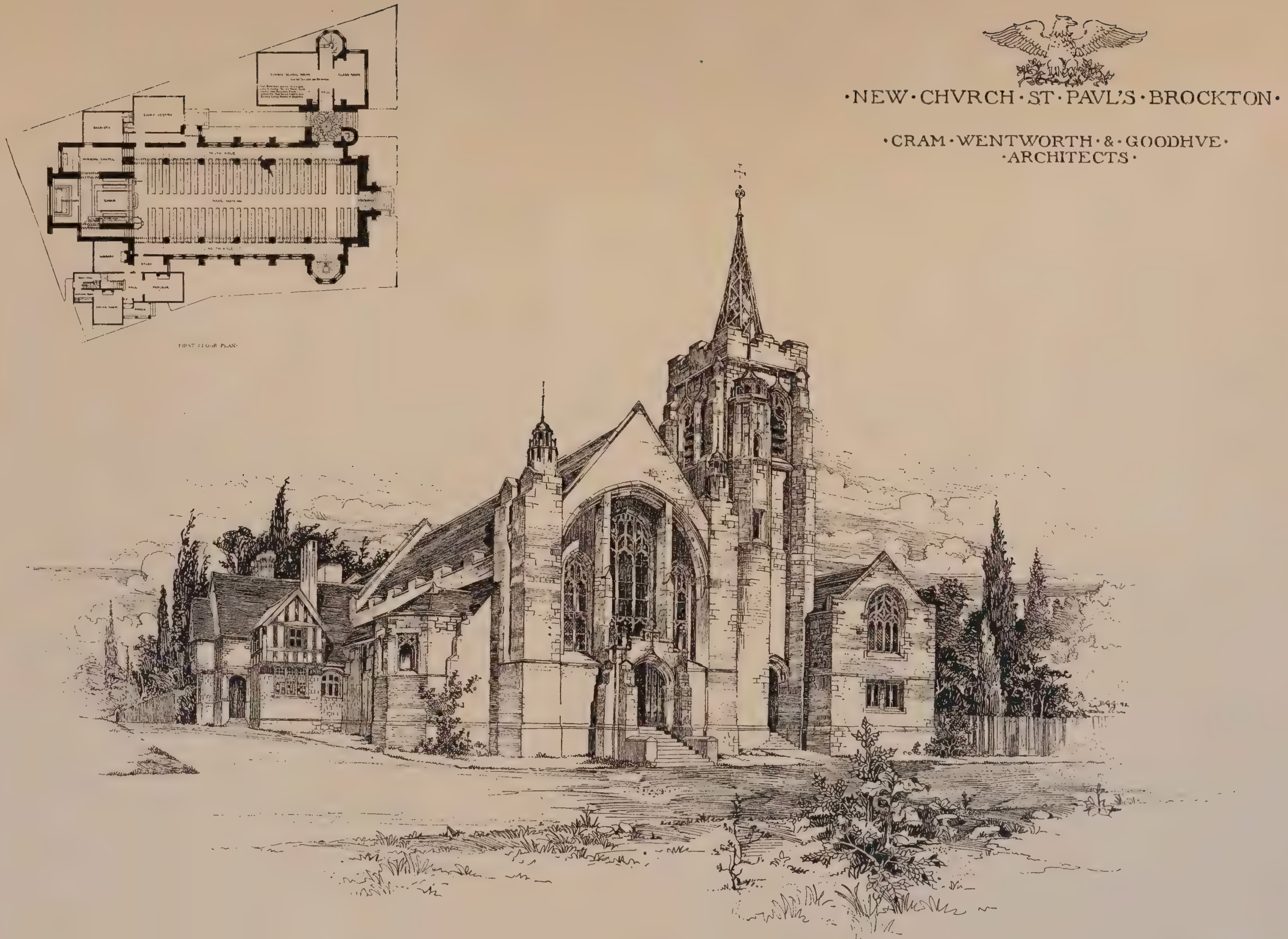
"The fourth........Mr. Austin Whittlesey.... ....a Californian. You would think that of the four he would be the most interested in the Iberian styles. Well, after all, he is one of the most interested, for there are two books on Spain by him which are now standards, besides which he has done, of course, a lot of our 'greaser' work in California. Yet he it is who has the Nebraska State Capitol in charge and who is producing at my instigation at the present moment, God-knows-what-kind-of-Classic."

And he went on to mention the work of James Perry Wilson, Wallace Harrison, Elliot Chisling and all of the other members of the office force in glowing terms.

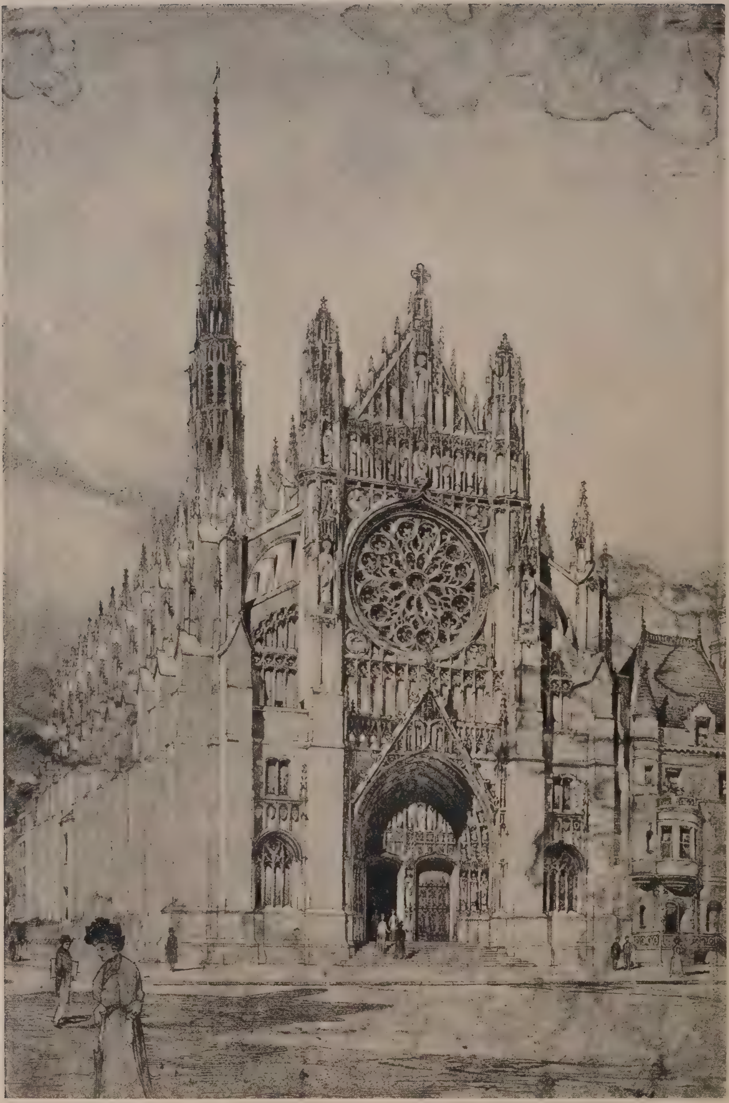
"Pretty" things are often said on festive occasions —but not too much stock may be taken in them; yet it was evident that Goodhue did not speak extemporaneously or without deliberation, and he dictated what he intended to say; and, I believe, meant what he said.

Now none of the men of whom he spoke so highly made Goodhue; but to some considerable measure, it may be inferred, he had a great deal to do with making of each of them; and took pride in their success in measuring up to his standards and expectations. He afforded opportunity and encouraged initiative on their part. Ordinarily human gratitude would bespeak unenforced loyalty to such character, even when coupled with less power to command admiration for the artistic ability of the leader; so that he was able to speak of his work as "our work" with greater exactitude of expression than could often be found where such utterance is commonly employed for business reasons—one of which is, frequently, the purpose of suppressing the name of some all-important factor in the designing. Goodhue could afford to speak frankly and fairly

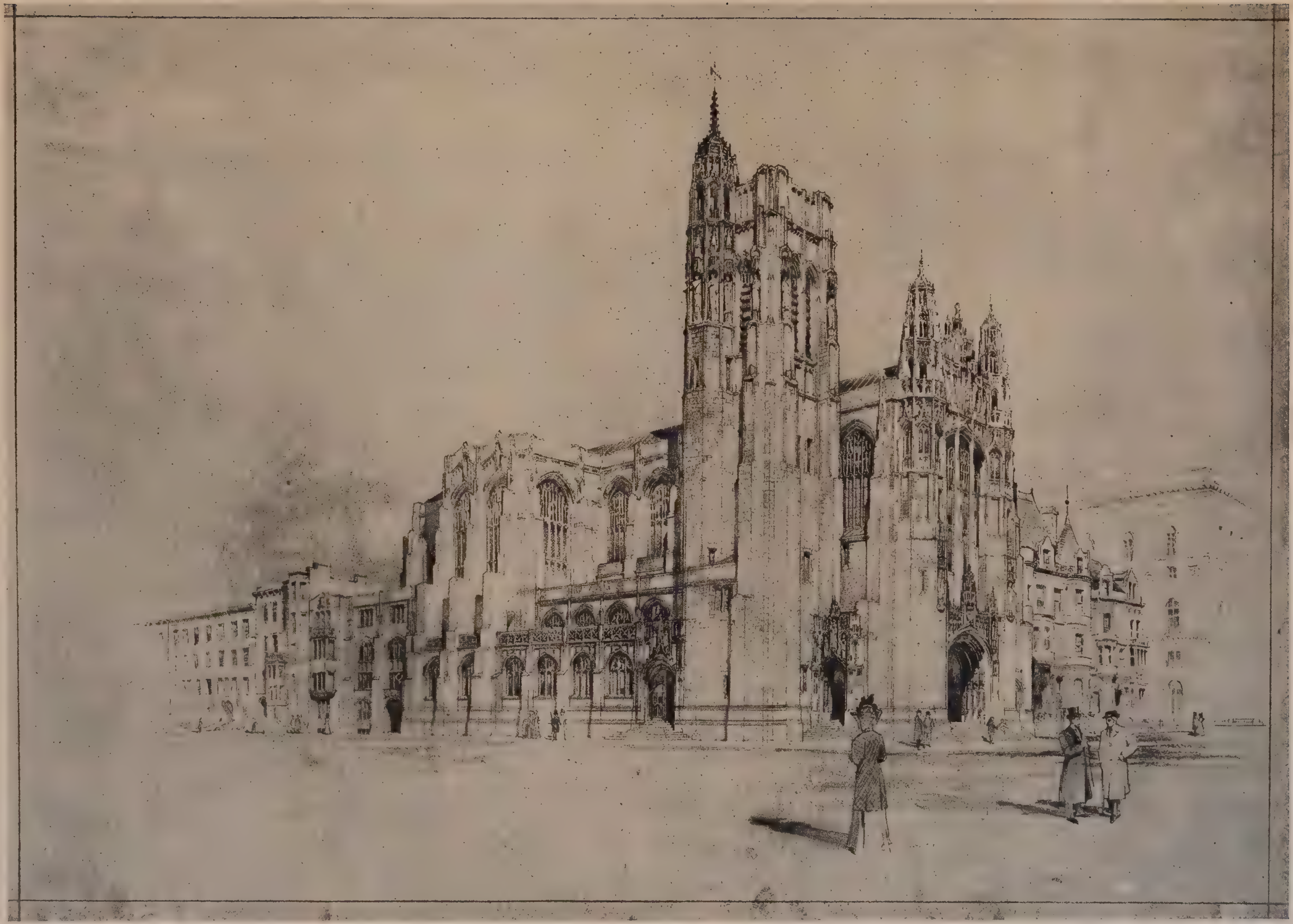
Drawing by Bertram Grosvenor Goodhue.
The Parish House, St. Peter's, Morristown, N. J.



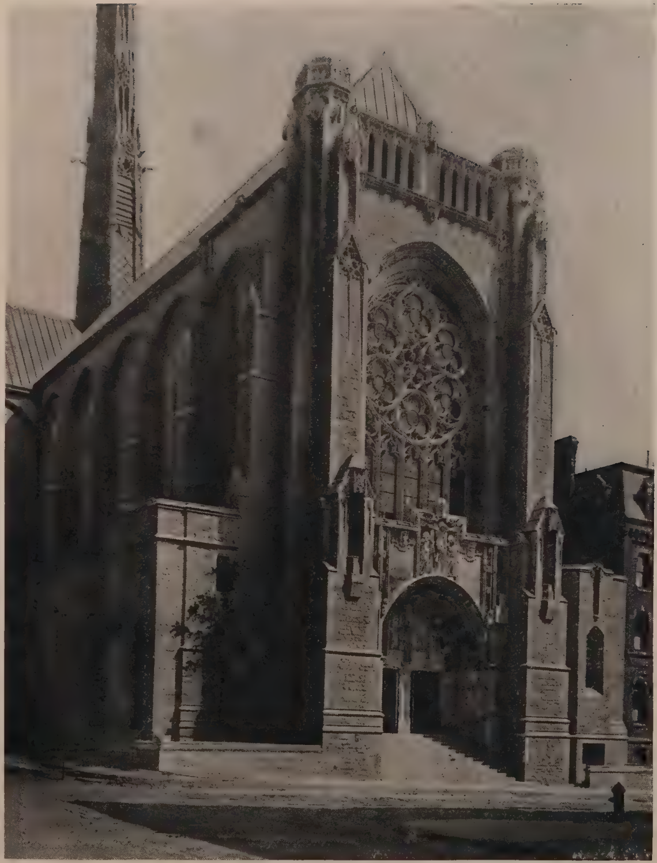
An Early Drawing by Bertram Grosvenor Goodhue (1892).



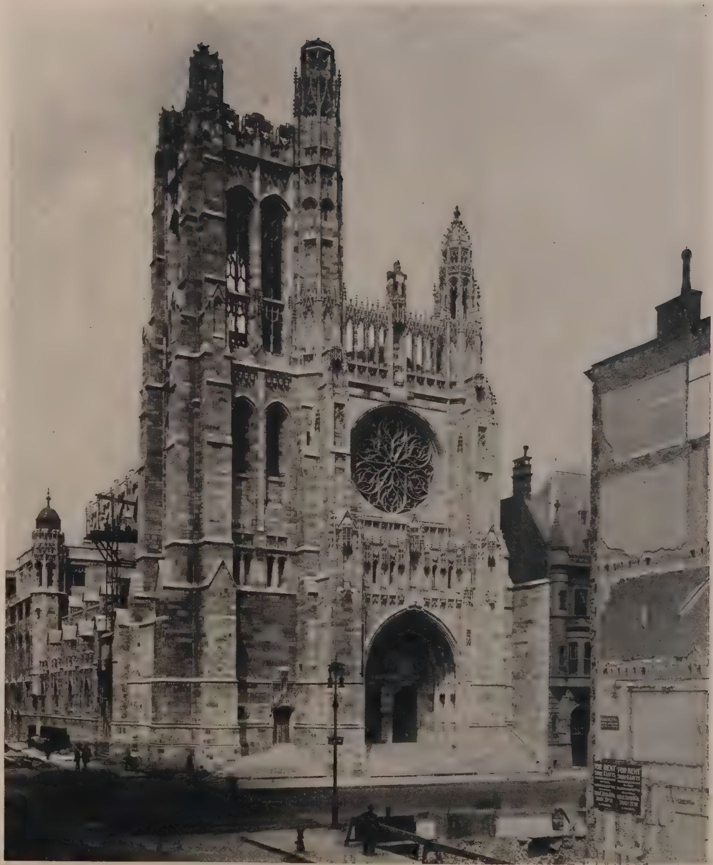
Sketch-Study by Bertram Grosvenor Goodhue for St. Thomas' Church, New York.



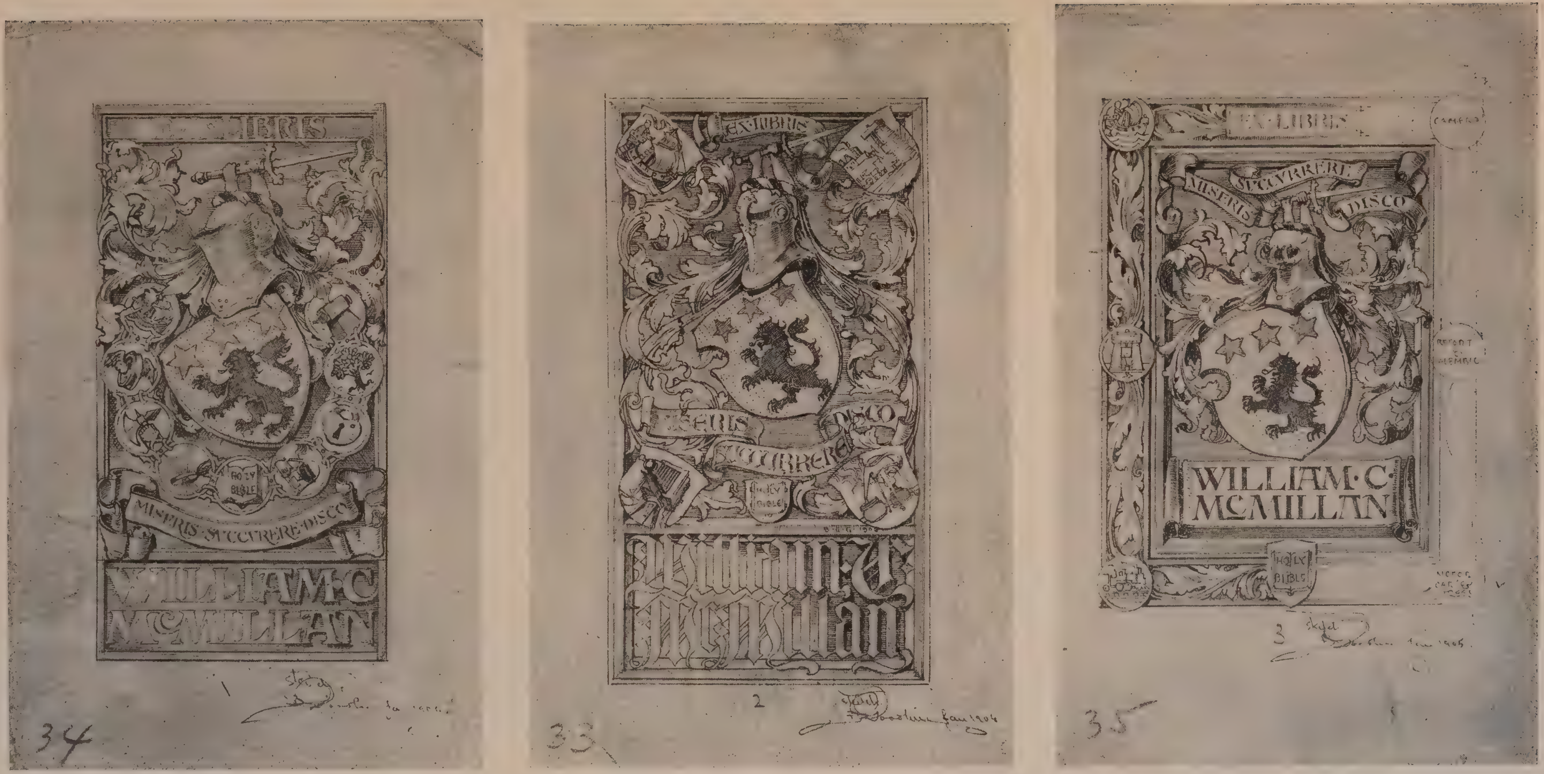
Sketch-Study by Bertram Grosvenor Goodhue for St. Thomas' Church, New York.
Cram, Goodhue & Ferguson, Architects.



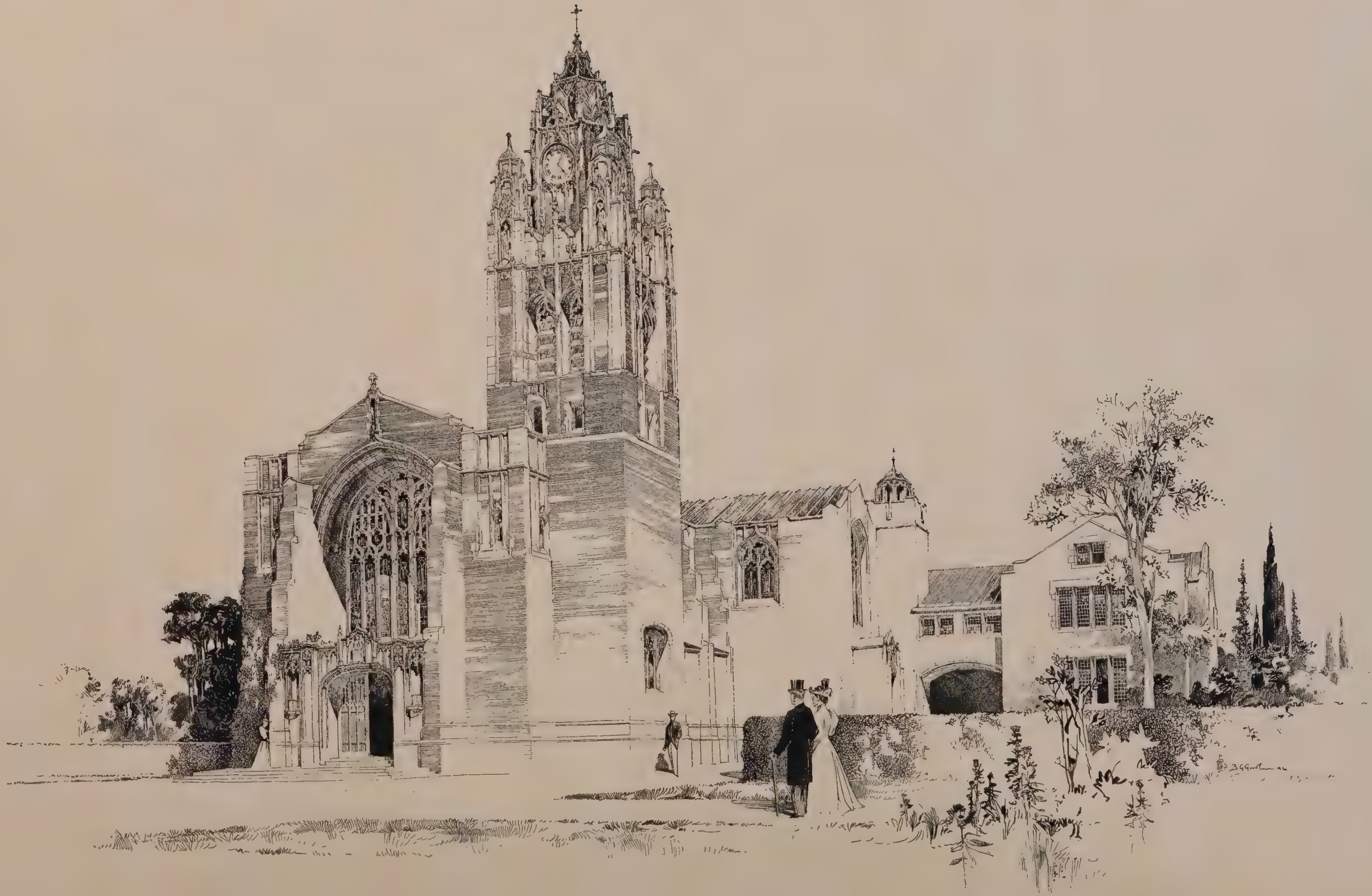
Church of St. Vincent-Ferrer, New York
Bertram Grosvenor Goodhue, Architect.



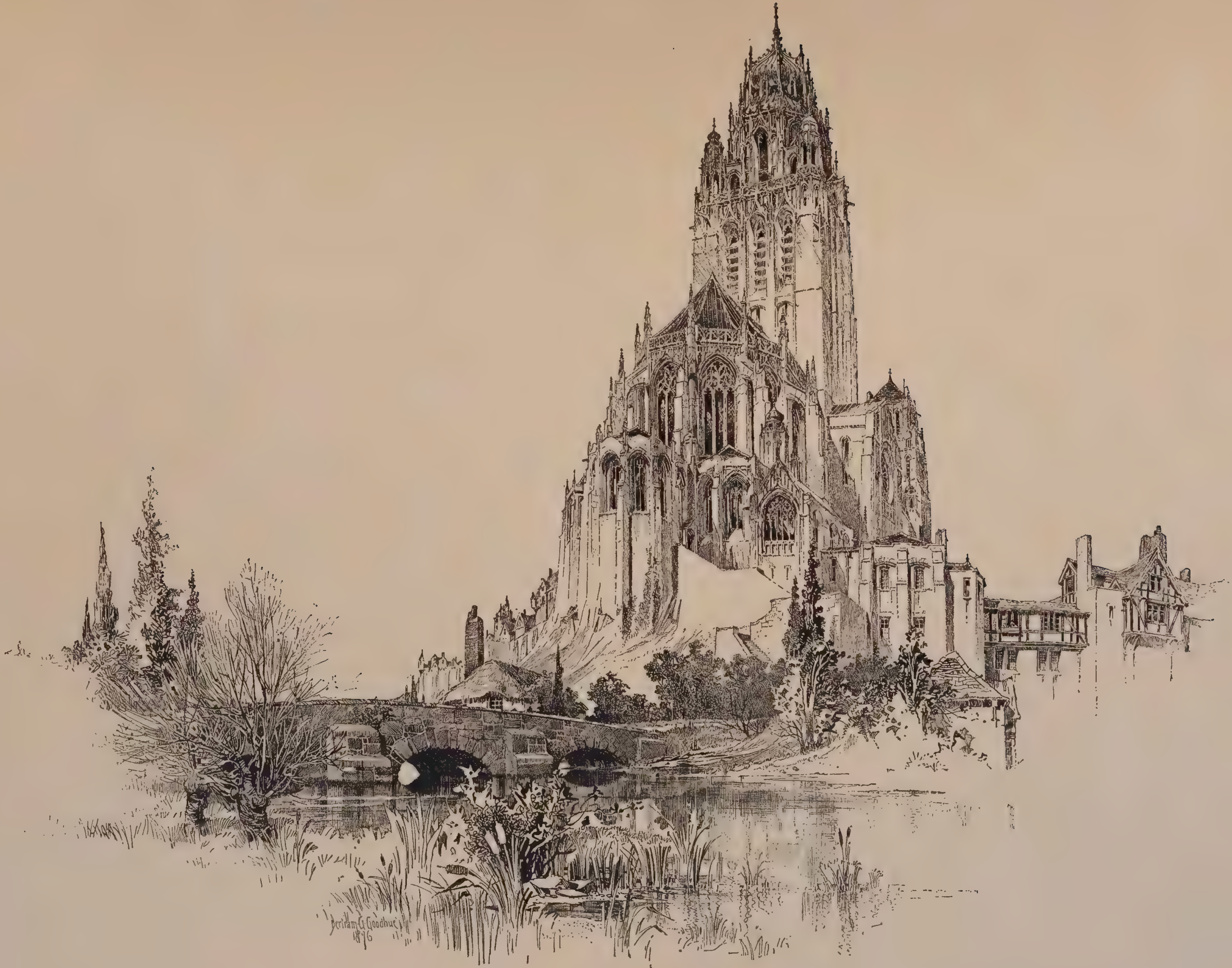
St. Thomas' Church, New York.
Cram, Goodhue & Ferguson, Architects.



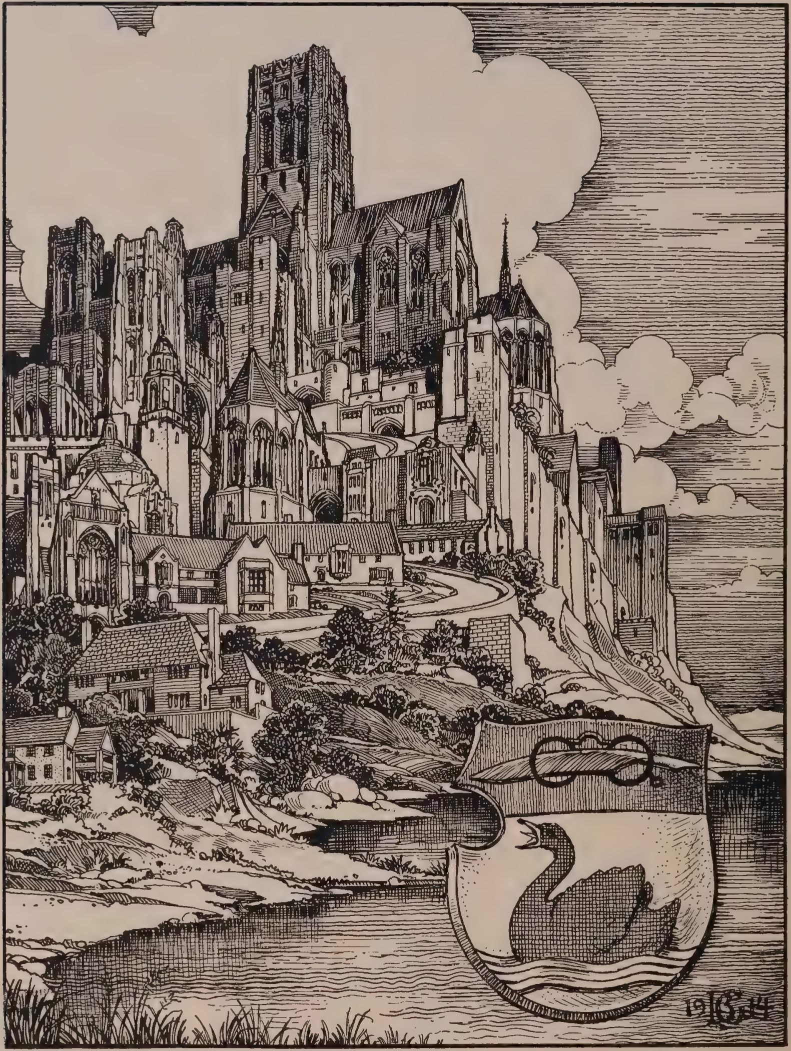
Three Studies for a Bookplate by Bertram Grosvenor Goodhue.



Design for St. Paul's Church, Rochester, N. Y. Cram, Goodhue & Ferguson, Architect.



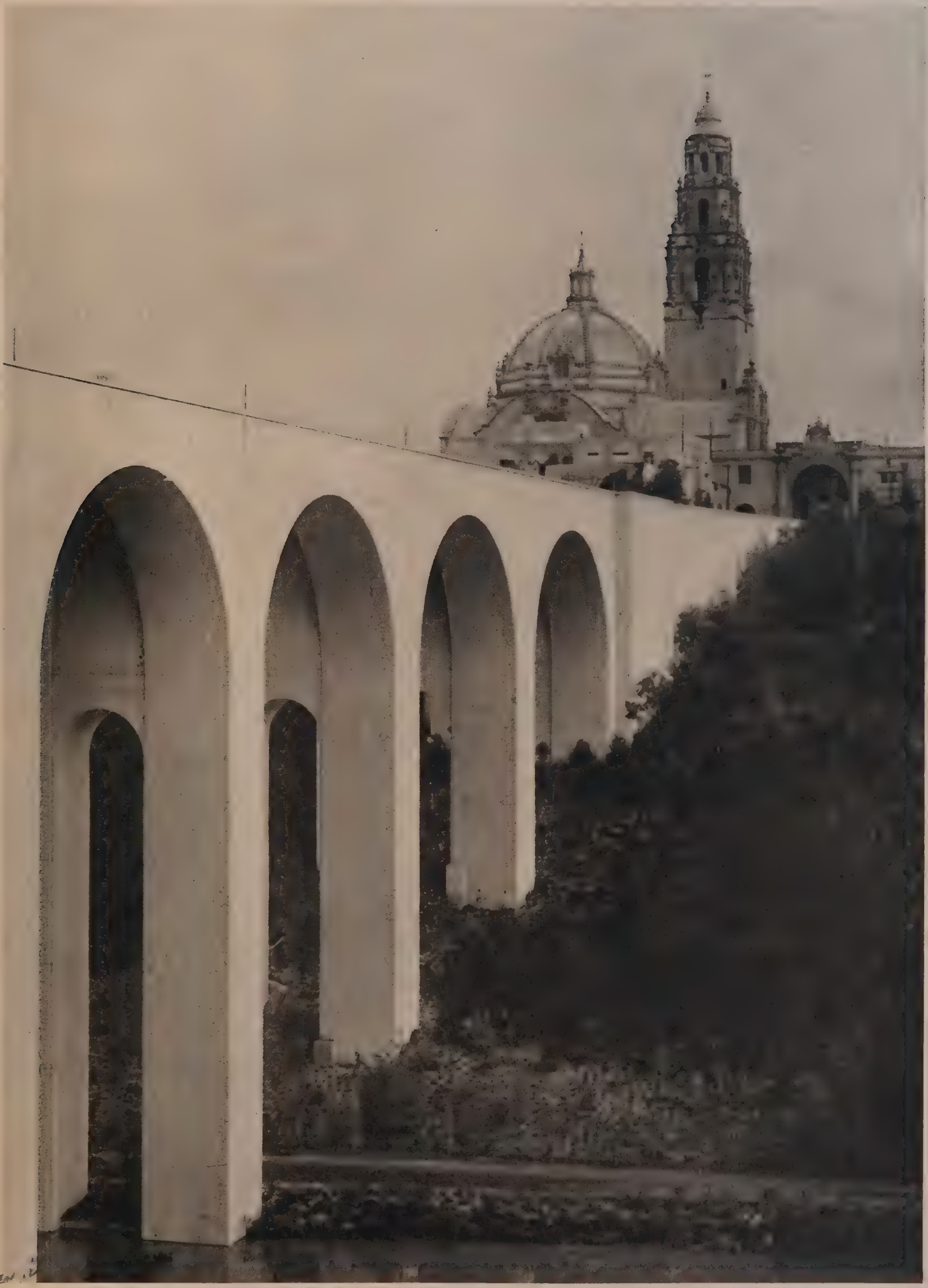
Ideal Composition, Church of St. Kavin, Traumburg, Bohemia. By Bertram Grosvenor Goodhue.



Courtesy of The Architectural Book Publishing Co.

1914.

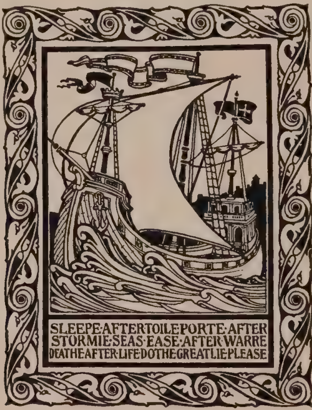
Ideal Composition Imprint Made for "A Book of Architectural Drawing by Bertram Grosvenor Goodhue."



Buildings at the San Diego Exposition. Cram, Goodhue & Ferguson, Architects.

of those about him. His remarkable ability and individuality as a designer and draftsman had long been recognized before he became a "successful" architect—that is, one with a large practice, and consequently, with a rather large office and drafting force; but he was naturally a man above jealousy and above greed of praise, and, to a great degree, above pride of opinion. His notable prejudice was against the schools of architecture. He contended that he disapproved of architectural schools, but did not disapprove of education. He seemed to think that there was no harm in learning anything as long as it was not taught to the learner systematically. Like most followers of English Gothic, his arguments were based upon foundations of personal preferments in style and were not always to be taken seriously. Contentions in favor of the "born architect" unconvincing in the face of his own intense diligence in studentship—in the applicatory method of using over and over again a studied motif or even a whole composition. Goodhue, however, did not require for his own development anything that a school could give him. he had an abundance of energy and a natural force of application not often found in the many would-be architects who find instruction a necessary evil. He produced two or three hundred finished pen-and-ink rendered perspective drawings alone—all drawn with a crow-quill pen and an extremely fine line on large sheets of Bristol board—and that is to state nothing of his plans and elevations, none of which, I recall having seen published—of which he made a prodigious number. He seldom essayed color. "A Book of Architectural Drawings by Bertram Grosvenor Goodhue," in which a collection of many of Mr. Goodhue's finest drawings is shown is an evidence of his industry and skill. He studied his designs from good English models with exactly the same processes as the good student at the *Ecole des Beaux Arts* studies from good French models; or as the others study from the conventional models of the *projets* of the school—making study after study until the design appears right to his eye; but he seems never to have learned that his method was precisely the same as their method of arriving at results in a different style. Among the more interesting illustrations available for this article are three of his studies for a book-plate made with a hard pencil on Bristol board which serve to show that Goodhue was no producer of "flashes of masterful genius from an empty head," but a thoughtful and painstaking worker in anything that he undertook. He was endowed with a fine capacity for the understanding of architecture, and picturesque effects, a brilliant imagination, and a talent for composition that was only equalled by his tenacity to type. Although known mainly as a Gothicist, he denied the appellation; and he seemed, in fact, to work with more freedom, facility and artistry in such style as his designs for St. Bartholomew's Church, New York, and the Cathedral for Los Angeles. One of the most interesting commentaries to be made upon his work is that in some of his latest and largest conceptions such as the Nebraska State Capitol, design for the Kansas City Peace Memorial, and the recently dedicated building for the National Academy of Sciences at Washington, he turned from Gothic to that which he described as "God-knows-what-kind-of-Classic"—a "classic" however, not unknown to the streets of modern London, Glasgow and other cities of Great Britain. But in whatever style he worked, the dominant characteristic was always a happy, boyish enthusiasm for he was one of those men who would never grow "old," and, had he lived to a venerable age he would have remained young in his feelings and interests and would have continued to produce wor kwith with feeling, fresh and vivacious.

Francis S. Swales.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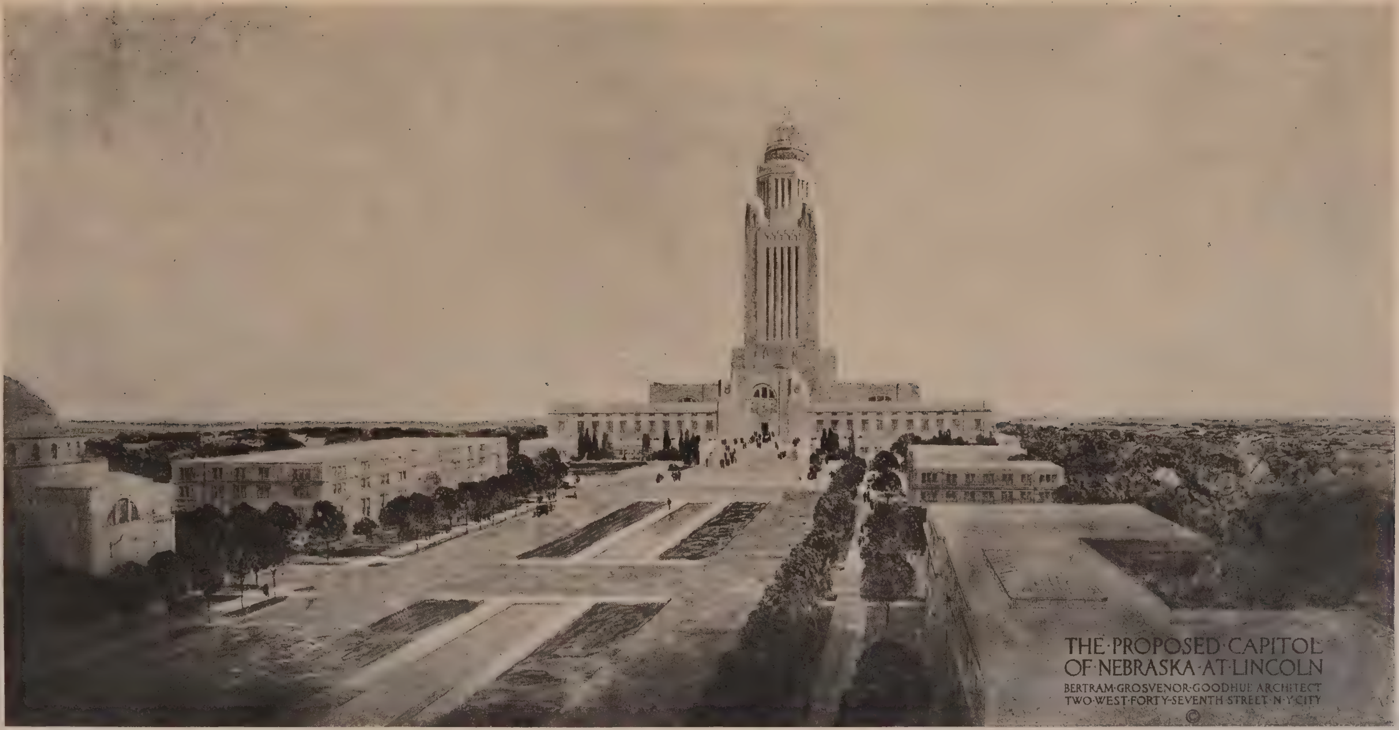
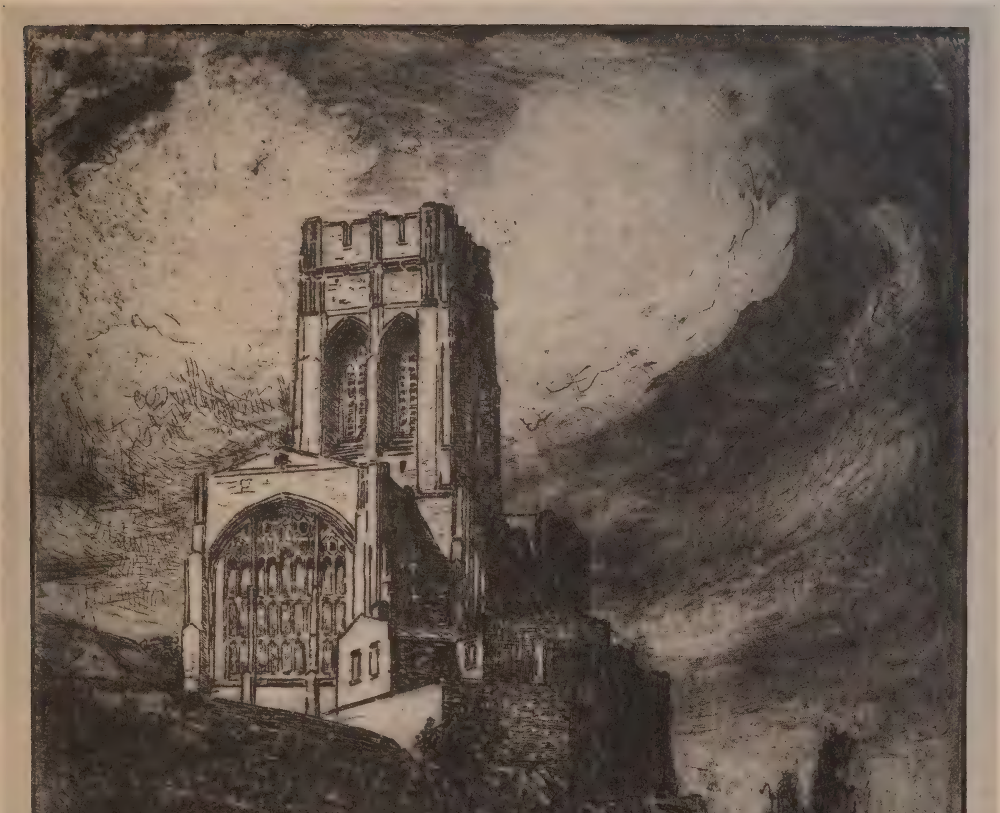
Design by
Bertram Grosvenor Goodhue.


THE·PROPOSED·CAPITOL
OF·NEBRASKA·AT·LINCOLN
BERTRAM·GROSVENOR·GOODHUE ARCHITECT
TWO·WEST·FORTY-SEVENTH STREET·N·Y·CITY
©

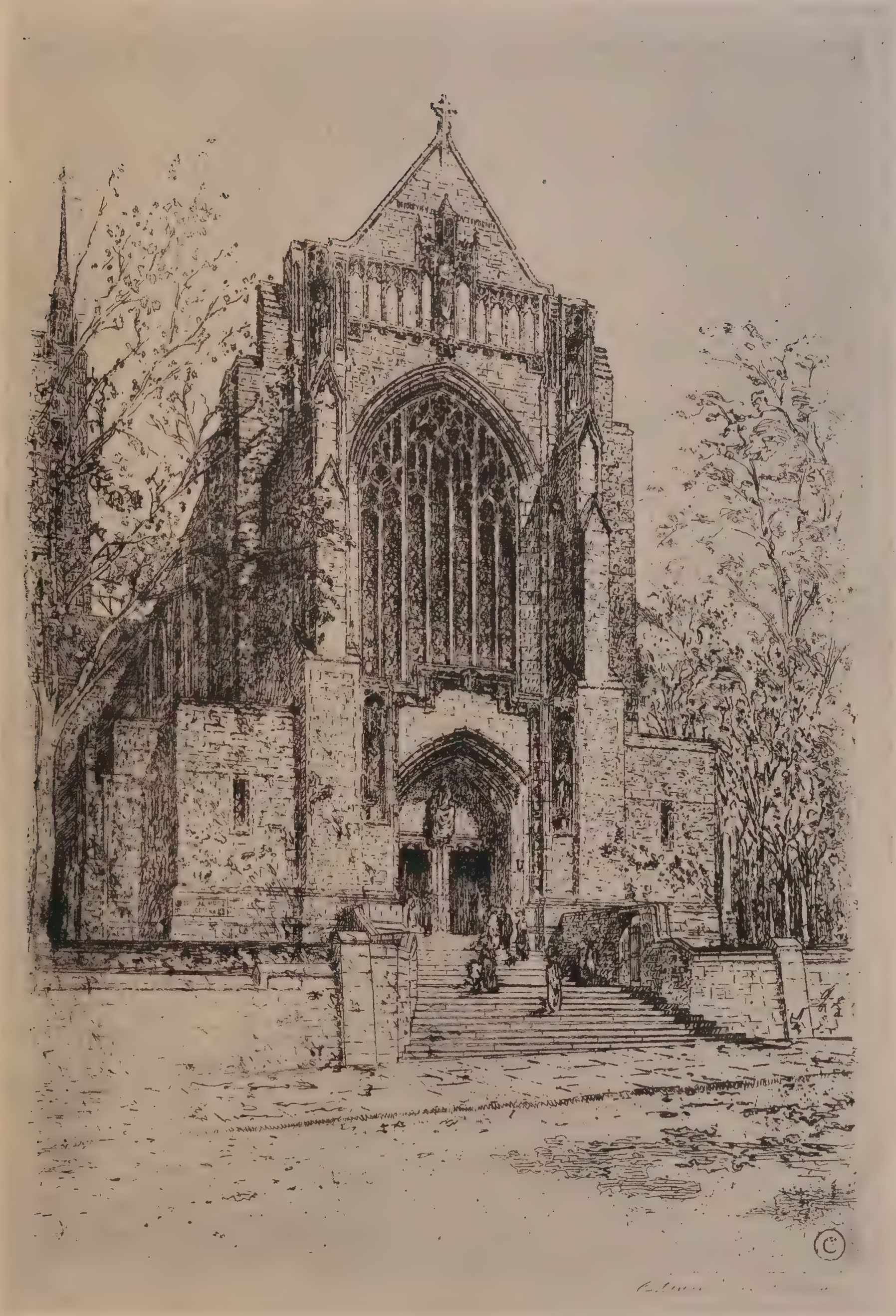
RENDERING BY BIRCH BURDETTE LONG
THE PROPOSED CAPITOL OF NEBRASKA AT LINCOLN. BERTRAM GROSVENOR GOODHUE, ARCHITECT

On the other side of this sheet is reproduced a rendering by Birch Burdette Long, showing Bertram Grosvenor Goodhue's design for the Nebraska Capitol at Lincoln, in the State in which it is being carried out. Mr. Goodhue's radical departure from the usual type of capitol building, it will be recalled, aroused great interest at the time he received the award in the competition conducted for the purpose of choosing an archiect for this building.



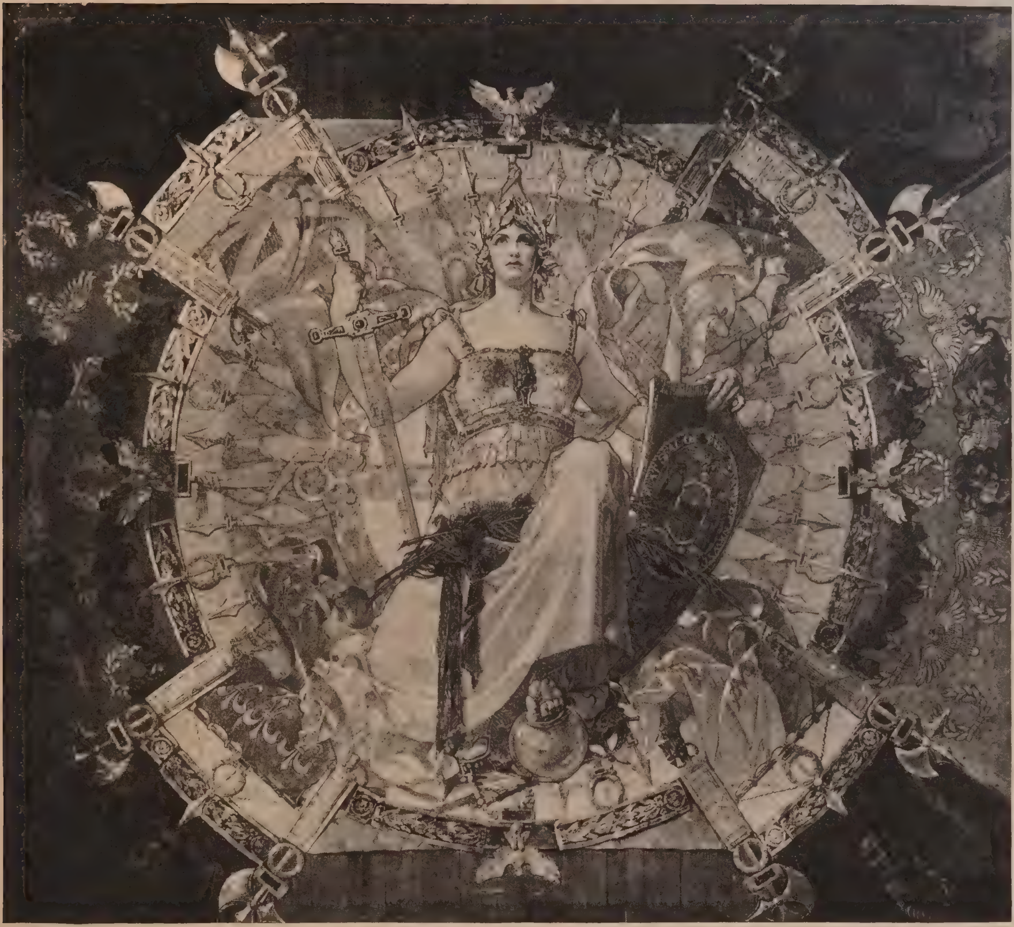
ETCHING BY N. LOWELL. CHAPEL AT WEST POINT MILITARY ACADEMY.
CRAM, GOODHUE & FERGUSON, ARCHITECTS.

An etching by N. Lowell of the chapel at West Point Military Academy which hangs in the lobby of Mr. Goodhue's offices is reproduced on the other side of this sheet. It is an interesting presentation of an essentially pictorial character.



ETCHING BY EDMUND L. ELLIS. CHAPEL OF THE INTERCESSION, NEW YORK.
B. G. GOODHUE, ARCHITECT.

The great ceiling decoration which William de Leftwich Dodge is now completing for the flag room at the Capitol in Albany is represented in the plate on the other side of this sheet, which shows the central portion of this decoration. It is masterly in conception and composition and rich and vibrant in color. This decoration is shown in the making by photographs on other pages of this issue.



CENTRAL PORTION OF WILLIAM DE LEFTWICH DODGE'S CEILING DECORATION, FOR THE FLAG ROOM OF THE NEW YORK STATE CAPITOL AT ALBANY, N. Y.

The etching by Edmund L. Ellis of the Chapel of the Intercession, reproduced on the other side of this sheet is a delightful impression by an artist of an architectural subject. The building, its surroundings and the light effects are merged in an interpretation that has much charm of expression.

ARCHITECTURAL WATER-COLOR SKETCHES

ONE may say of the brilliant water-colors, of "stunning" presentations of architectural work that enliven our exhibitions, and of clever and novel methods and technique evinced by them that a great deal of caution is necessary in appreciating, or attempting to assess intrinsic merit or value to students of the beautiful.

In what respect do they point a way that is worthy of emulation; or record an impression of particular interest, or study of dignity, repose, refinement or any of those highly valuable, essential qualities which the artist in his process of selection and use of his insight and imagination extracts from the infinite mass presented by nature?

What was the purpose of the artist: a display of technique; to record and convey a pleasurable impression; to study a splendid combination of form and color, or merely note of effect for his own future technical use?

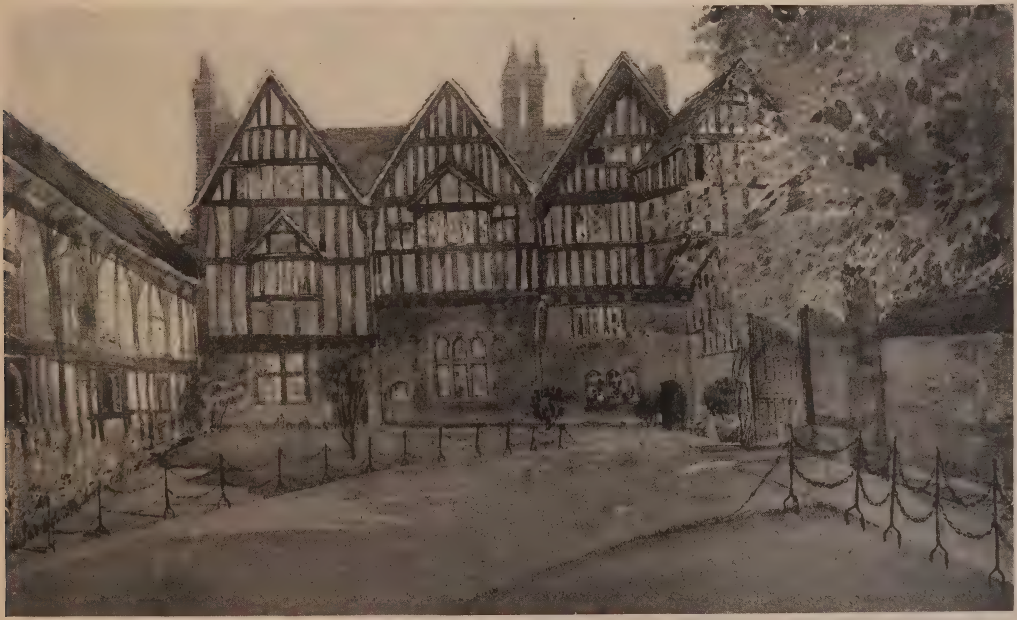
Then there are always the questions of progress in expression and of standard. Is the expression more direct, simple, charming, pleasing or more clever than those that have gone before, and are now all but forgotten? Is the standard as high, not so high or higher than the similar classes of work done a few years ago, a generation, a century, or ages ago? Is there something about them that refreshes interest in the subject? Everyone who sees the original can answer such questions for himself. But when expressions are translated into black and white some comment or explanation seems necessary. For color in a water-color is as important as Hamlet in "Hamlet."

Appreciation will, of course, differ with different temperaments and differing experiences. Choice of subject, too, will have its effect, and the reaction to written comment must depend to some extent upon the success of reproducing process to convey in black and white values, illustration of the original color work upon which the comment is based.

Subjective drawing usually seeks to convey to somebody's else mind an impression received or a conception by the artist.

In making sketches from nature the brain takes a large share. In the process of observation, impressions form instantly, change rapidly and disappear into others; knowledge comes into play and the mind jumps from what the eye actually sees to that which the mind wishes to see. The artist avails himself of selection, revision,, suggestion—emphasizing this, subduing that, as he goes along—which he finds he must employ to express himself.

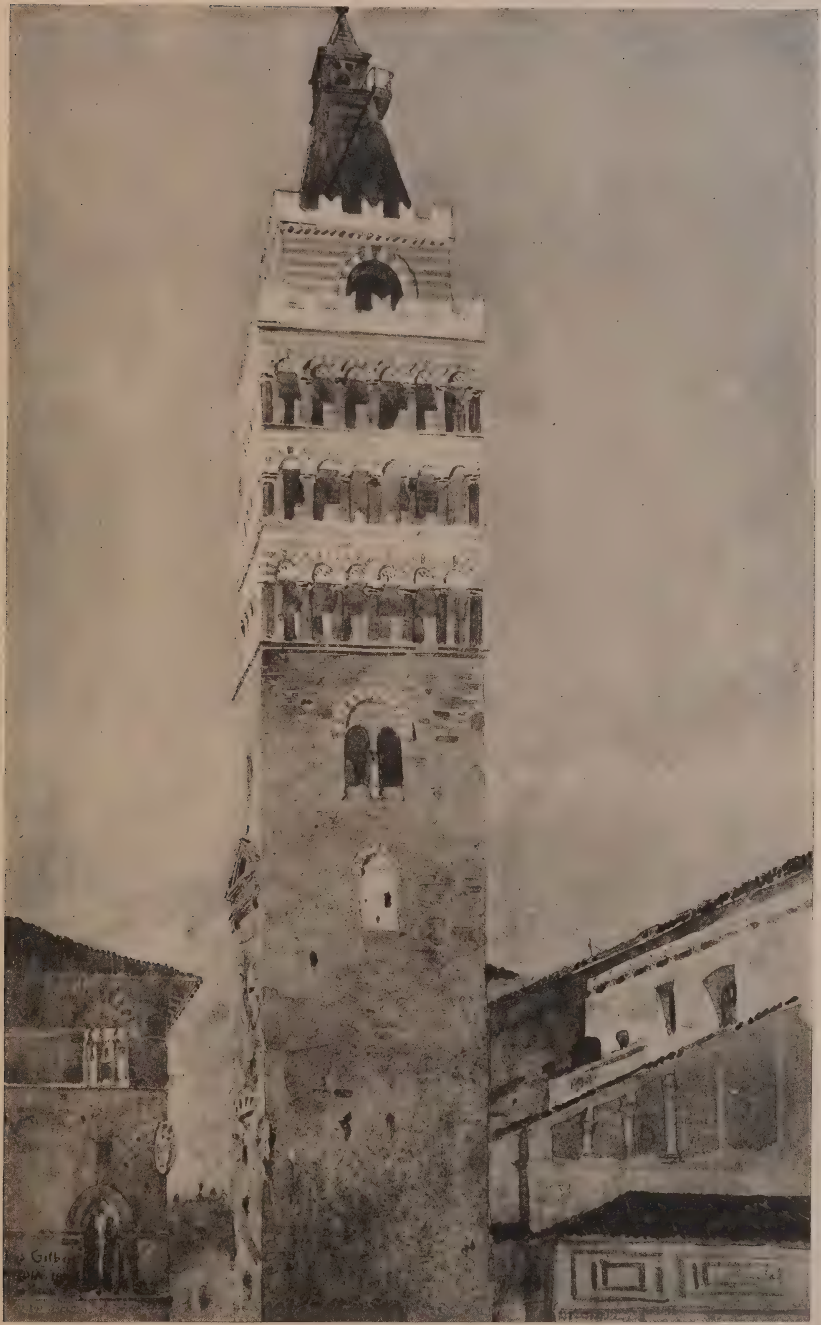
Upon refinement of judgment in the selection of the subject and that which he will eliminate or



Water Color Sketch by Cass Gilbert. Made in England During the Summer of 1923.

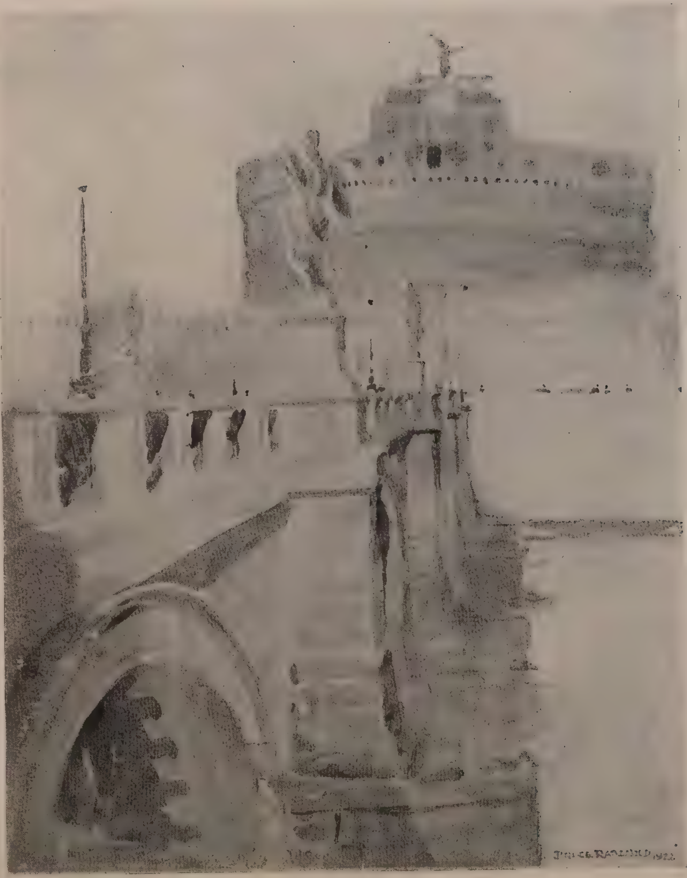
Sketch Made in England, 1923, by Cass Gilbert.

The Amsterdamer Gate, Haarlem. Sketch by Cass Gilbert.

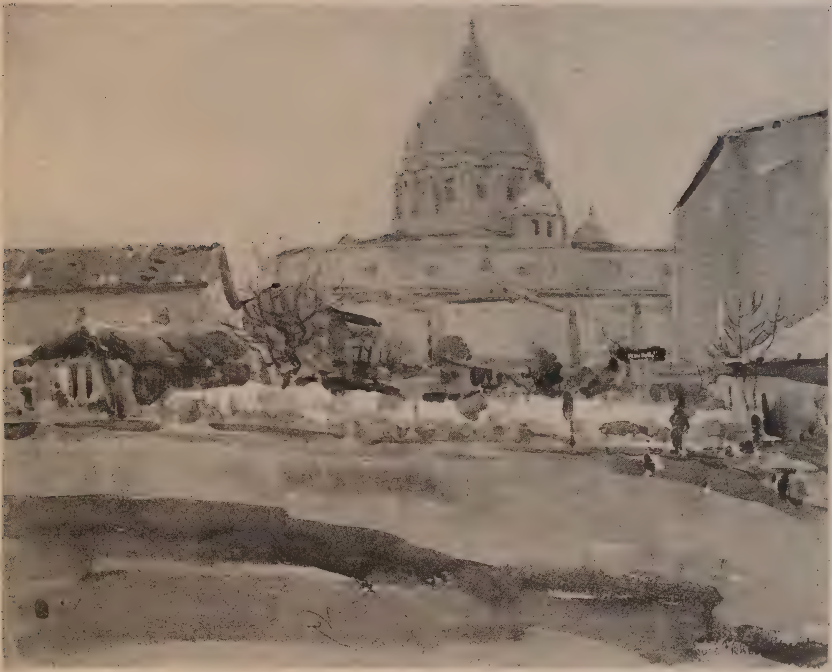


Water Color Sketch by Cass Gilbert. Cathedral Tower at Pistoia, Italy.

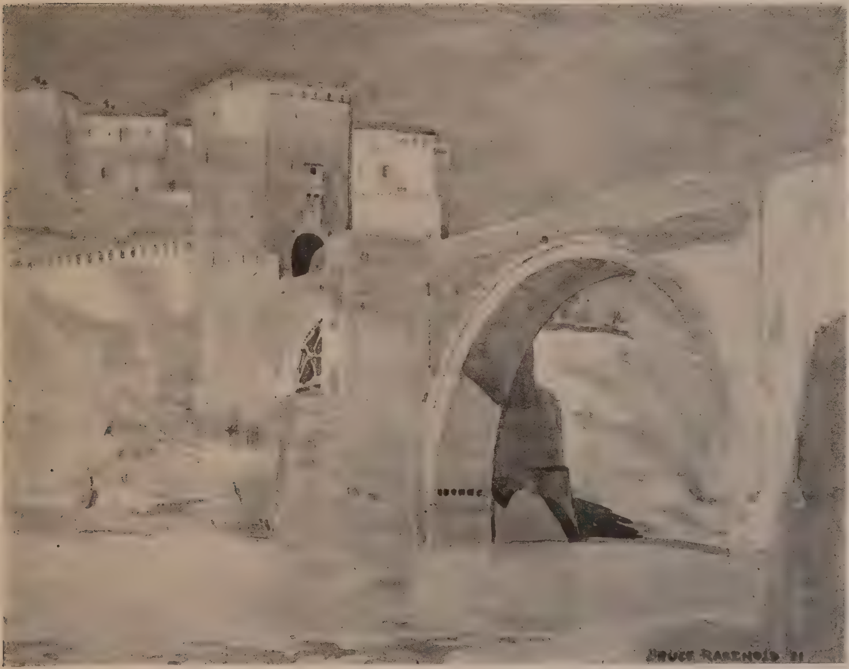
A Gateway in Toledo, Spain, Sketched by Bruce Rabenold.



San-Angelo Bridge in Rome, Sketched by Bruce Rabenold.



St. Peter's, from a Trattoria in Trastevere, Sketch by Bruce Rabenold.



Puente Alcantara in Toledo Spain, Sketch by Bruce Rabenold.

Water Color Sketch by Cass Gilbert.

suggest in his interpretations of it will depend the response of interest on the part of connoisseurs of his art.

Most architectural students soon dabble in water color, and nearly all draftsmen after a few years experience make some serious efforts to render with color. Many give it up as something hopeless when they have only half tried and when they have had all the success they deserved. It is often an unsuspected advance in knowledge to simply discover that an effort has proved a failure. The next step is to compare the failure with the work of somebody else, which seems to be good, and to note wherein one's own is particularly at fault. The beginner should look particularly to the principal color hues. The sky is probably not so blue, the grass probably not so green, the roof probably not so red, the stucco or paint probably not so white and the shadows positively not so black as they seemed when he "painted" them. The old English water-colorists like Girtin, Bonington and Cotman—each in a different way—blended their colors by running light washes of every other color used in the picture into every particular color. If the picture has a "blue" sky, "yellow" building and "green" grass, it will be found that some of the blue of the sky is mixed in the yellow of the building giving it a "greenish" tone, and some of the yellow of the building is carried into the sky giving it also a greenish tone. The "green" grass will be found to be a combination of the yellow of the building and the blue of the sky. But no blue and no yellow to be found in the color box will "match" those of the sky and building respectively and experiment will prove that both the blue and yellow contain quantities of red and secondary colors—orange, green and violet, abound in previously unnoticed places with a whole troop of greys of indescribable tones. With those simple facts grasped, practice and much more practice will produce good ordinary water-color work. The best work is founded on knowledge.

Of the great many sketches which find their way to the publishing office, few are usable for the purpose of finding and presenting to the readers and students as models of highly accomplished work. It is necessary to search out, or discover by accident, the most meritorious work.

The accompanying illustrations of water-color sketches in England, Holland and Italy by Mr. Cass Gilbert, show the fullness of experience of the matured architectural artist. In reproduction they show all that a photograph could; but they show it with a sense of the third dimension that the photograph lacks. In regarding the original water-colors the main observation is somewhat the same. The natural color is so well felt and so well expressed that we seem to see the actual building rather than the sketch, but as we examine the color—"smelling the paint," so to speak—we find it "like nature," but more easily comprehensible.

The four other sketches, two made in Rome, and two in Toledo are the work of a much younger and not so well known artist; but one who has gone far in the study, handling and mastery of that difficult, elusive, changing thing, color. The two sketches of the "Bridge" and "Gateway" in Toledo belong to that dignified old school of "the yellow building and blue sky"—in fact a riot of glowing colors but the technique is fresh and modern. It requires an effort to realize that the main shadows in both—and the roadway as well, in the sketch of the gateway—are glowing "purple." The beauty of the compositions and directness of handling the washes are evident in the reproductions. In the two sketches of buildings at Rome the use of lively color is more obvious. We feel that the artist was "having the time of his life" when he was making the sketches, for the sketches themselves fairly shout for joy in their glorious color. The sky and the church in the sketch of St. Peter's may be described only as "greys"—but the greys encompass the gamut of color. And what courage it must have taken to put in those slashes of smalt and burnt sienna in the foreground! After success with all that deft handling of the touches of vivid color in the middle distance—touches of crimson, scarlet lake, viridian, violet, French blue,

(*Continued on Page* 73)

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THE AMERICAN ACADEMY IN ROME

FROM letters recently received by C. Grant LaFarge, Secretary of the American Academy in Rome, from Gorham P. Stevens, Director, we quote the following items:

"The Spring exhibition of the work of the Schools will probably come in the early part of June, both because the King of Italy is to visit the King of England in May and because the members of the Augusteo Orchestra are to go to Naples and Sicily for a series of concerts throughout May. We sincerely hope that some of our Trustees will be present this year at the exhibition.

"Twenty-six members of the Classical School are in Greece at this moment. They first spent a week or ten days at Pompeii and Naples, and they saw Taranto on their way to Brindisi. Many of the Fine Arts students are away traveling, too. Everything is as quiet as can be at the Academy.

"One more registration has taken place in the School of Classical Studies: Mr. Newton S. Murphey, of Harvard, Wisconsin and Leland Stanford Universities. He has been admitted to the bar.

"The architects have had an opportunity to see the famous flat wooden ceiling of the Farnese Palace. These are probably the finest ceilings of their kind in the world. The men at once wanted to measure them, although they are thirty feet in the air, and will require fairly substantial scaffolding, to say nothing of the fact that the ceilings are in the reception rooms of the French Embassy to the Quirinal.

Messrs. Manship and Faulkner have left the Academy. Their recent travels included, Egypt, Constantinople and Greece. Their presence at the Academy has been a great incentive to the Fellows. We hope that the Trustees will send over other alumni in the future.

"Our President, Mr. William R. Mead, honored us with a flying visit. He came down from, and went back to, Genoa in a sleeper, spent one night with us, saw all the studios, lunched with the Staff and the Fellows, had a number of conferences, and visited Ostia and the Villa Chigi.

"Mr. John R. Morron gave Mr. Lamond five hundred dollars for the Department of Music.

"Mrs. Waldo Story presented the Academy with a large number of valuable photographs, which her husband, the well known sculptor, used in his profession.

"You will probably remember that for some little time we have been working on a scheme of admission to famous Italian villas. It seemed to us that this was a matter which could be better handled by the Italo-America Society of Rome. I am glad to report that this Society has now informed us that they will undertake to make the arrangements, and we have turned over all our data to them.

"The Ward-Thrasher Memorial is advancing. A special block had to be quarried at Verona. This is now in Rome and under the saw.

"Among the callers of note were Dr. George E. Vincent, President of the Rockefeller Foundation, and Mrs. E. H. Harriman."

"Our Greek party, after a most successful trip, returned this morning. They were away from Rome six weeks and a day, and they arranged $3.70 a day per person, or $158 for the whole trip, which is a smaller figure than that of any of our previous ones; and more ground was covered than ever before by making good use of automobiles. The success of the trip is due to the business ability of Prof. Lord, who carefully prepared every detail in advance.

"The first copy of Volume IV of the Memoirs arrived today from the printers. The articles are chiefly architectural, and the volume will, I trust, especially interest the architectural profession. The volume seems well printed, thanks to Prof. Curtis' care.

"The Annual Exhibition and Concert is to come May 28th. We are obliged to have the concert on this date, because the musicians of the Augusteo do not return sooner from a long tour, and they disband for the Summer a few days afterward. The King, the Queen and the Crown Prince will be in England at that time; we hope, however, that the Queen Mother, who cares for music, will come to the concert. There is to be an innovation. The sculptors are to exhibit their works in their own studios. The painters' and architects' works are to be displayed in the salon and billiard room.

"Architect Hafner is undertaking an interesting piece of work. He has made an excellent study of the lines of thrust in the dome of St. Peter's, and he has written a valuable thesis on the dome as a whole.

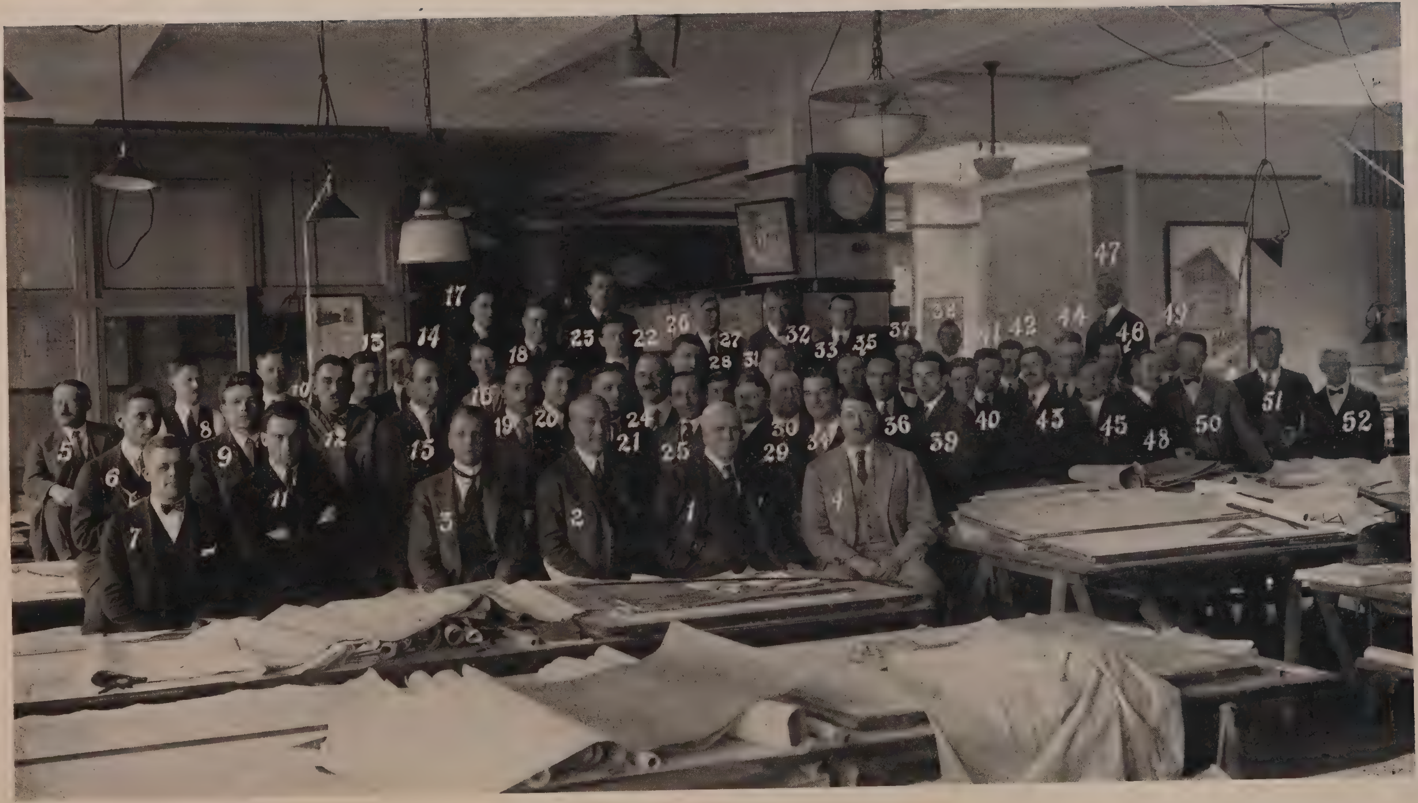
"Mrs. E. H. Harriman, who is still in Rome, has already visited the Academy three or four times, and she is coming again tomorrow to see more of the students' work. She is particularly interested in giving commissions to the men who have returned to America.

"Prof. Rolfe goes, in a few days, to Naples to represent the University of Pennsylvania at the 700th anniversary of the founding of the University of Naples. The Italians like such celebrations as these, and they do them well.

"There is to be an international congress of Agriculture in Rome, beginning May 2nd. The American Ambassador is the Chairman of the American delegation. The Ambassador informed me that the Department of State would appreciate it greatly, if the Villa Aurelia could be used on May 3rd for a reception to all the delegates. The Trustees have given consent, and we are making active preparation for the reception. If the weather is good, the affair is to be held in the garden, otherwise in the Villa itself. There will be a small orchestra of seven or eight light pieces, selected by Composer Hanson."

B. G. GOODHUE'S OFFICE CONTINUED BY ASSOCIATES

ARRANGEMENTS have been made with the estate of the late Bertram Grosvenor Goodhue for the taking over and continuation of Mr. Goodhue's office and organization. The firm will be known as Bertram Grosvenor Goodhue Associates, a partnership consisting of Mr. Goodhue's manager, Francis L. S. Mayers, and two of his foremost designers, O. H. Murray and Hardie Phillip. E. T. Jago is also associated with the partners, while Elliott Chisling and J. P. Wilson are the main stay of the staff with E. P. Praeger in charge of the structural end.



The Organization of McKim, Mead & White, Architects, New York.

1—*W. R. Mead,* 2—*B. L. Fenner,* 3—*T. J. van der Bent,* 4—*L. G. White,* 5—*C. A. Ruegg,* 6—*C. J. White,* 7—*J. S. Dolan,* 8—*K. Iverson,* 9—*J. Pendlebury,* 10—*I. Iverson,* 11—*J. Loughnane,* 12—*H. Nolan,* 13—*W. A. Gustafson,* 14—*G. V. Harvey,* 15—*C. J. Kidder,* 16—*M. B. Steinman,* 17—*W. Briant,* 18—*M. S. Dimmock,* 19—*G. H. Pohle,* 20—*K. M. Day,* 21—*D. E. Milone,* 22—*K. Kruchten,* 23—*C. E. Nelson,* 24—*L. Moses,* 25—*C. Hess,* 26—*H. M. Heatley,* 27—*G. F. Morse,* 28—*E. P. Rubillo,* 29—*F. J. Adams,* 30—*J. C. McGowan,* 31—*F. Steffins,* 32—*H. Lucas.* 33—*G. Laier,* 34—*J. P. Farrell,* 35—*J. J. Hay,* 36—*W. H. Sands,* 37—*W. B. Mylchreest,* 38—*E. Erhard,* 39—*A. Reuling,* 40—*A. Norgard,* 41—*J. Vegezzi,* 42—*E. R. Perry,* 43—*T. Koch,* 44—*L. Rich,* 45—*R. S. Goodell,* 46—*S. Paterson,* 47—*R. Charlton,* 48—*G. S. Koyl,* 49—*E. Liebrock,* 50—*J. K. Smith,* 51—*W. J. Creighton,* 52—*H. V. Wilmington.*

OTTO S. CERNY

OTTO S. CERNY was born in Vienna, Austria, but has lived in Chicago for the past eighteen years. After graduating from the Harrison Technical High School, he attended Crane Junior College, University of Illinois, and obtained his degree in architecture at the Armour Institute of Technology. Under Professor S. Campbell of Armour he took a two-year post-graduate course, working on Beaux-Arts projets. He was the winner of the $100 C. G. Everson Prize at Armour and one of the participants in the second preliminary of the Paris Prize 1914. Mr. Cerny is massier and one of the organizers of the Chicago Atelier. After working in the office of S. S. Beman for three and one-half years he opened an office for the practice of architecture in the Temple Building, Chicago. Mr. Cerny considers himself greatly indebted to Edmund S. Campbell for his encouragement and help. Mr. Cerny sailed the twenty-first of May for England where he plans to spend about five weeks travelling, after which he will travel on the Continent, returning to this country in about a year.

ARCHITECTURAL WATER-COLOR SKETCHES

(*Continued from Page* 70)

bright yellow, and the color of old Italian tiles covered with moss, a mixture of green and gold, and red, without any one of them apparent—why take a chance of spoiling it all?—with those two bold, fortunately successful, strokes of strong color in the foreground? Well, to cover them with one's hand demonstrates that they do immeasurable work in the whole color-composition and the end justifies the means. The Bridge and Castle of San Angelo, as color work, falls somewhere between the gorgeousness of the sketch of St. Peter's and the dignified reserve of the drawing of the Bridge at Toledo. Not the least notable point about this water-color is the use the artist has made of the surface of a rough canvas-like paper to give vigorous texture to his subject. F. S. S.

ARCHITECTURAL BOWLING LEAGUE OF NEW YORK

THE Architectural Bowling League of New York held its annual meeting for the nomination and election of officers for the coming year, at the Pershing Square Savarin, Tuesday, May 13th.

Two new offices were created: namely, Second Vice-President and Financial Secretary. An active Treasurer was also elected to relieve the Secretary of financial work as the organization has more than doubled in size. The former President, Vice-President and Secretary were unanimously re-elected for the year 1924-5.

Officers are as follows:

President, E. L. Capel of A. C. Bossom, 680 Fifth Avenue;
Vice-Pres., H. G. Poll, of Cass Gilbert, 244 Madison Avenue;
Second Vice-Pres., E. J. Burke, of Andrew J. Thomas, 15 East 47th Street;
Secretary, N. T. Valentine, of Warren & Wetmore, 16 East 47th Street;
Treasurer, J. Finegan, of Sommerfeld & Stechler, 31 Union Square;
Financial Secretary, H. R. Hutchinson, of B. W. Morris, 101 Park Avenue.

EXECUTIVE COMMITTEE

G. R. Paradies, of McKenzie, Voorhees & Gmelin;
E. S. Lyman, of Warren & Wetmore;
C. L. Elliott, of Starrett & Van Vleck;
R. G. Heinewald, of Guilbert & Betelle;
N. W. McBurney, of Peabody Wilson Brown;
B. Moscowitz, of York & Sawyer;
E. Weck, of J. E. R. Carpenter;
G. A. Flanagan, of Donn Barber;
A. J. de Pace, of A. C. Bossom.

Membership of teams to date:

1—A. C. Bossom,
2—Cass Gilbert,
3—Warren & Wetmore,
4—McKenzie, Voorhees & Gmelin,
5—B. W. Morris,
6—W. L. Stoddart
7—Sommerfeld & Stechler,
8—McKim, Mead & White,
9—James Gamble Rogers,
10—Thomas W. Lamb,
11—Donn Barber,
12—Dwight P. Robinson & Co.,
13—Guilbert & Betelle,
14—Starrett & Van Vleck,
15—Schwartz & Gross,
16—Peabody Wilson & Brown,
17—Kohn & Butler,
18—J. E. R. Carpenter,
19—Andrew J. Thomas,
20—Holmes & Winslow,
21—Patterson King Corporation,
22—Schultze & Weaver,
23—Alfred Hopkins,
24—York & Sawyer,
25—Mott B. Schmidt,
26—A. F. Gilbert.

Chairman of Active Members, Patrick M. Lynch, 709 6th Ave., New York.

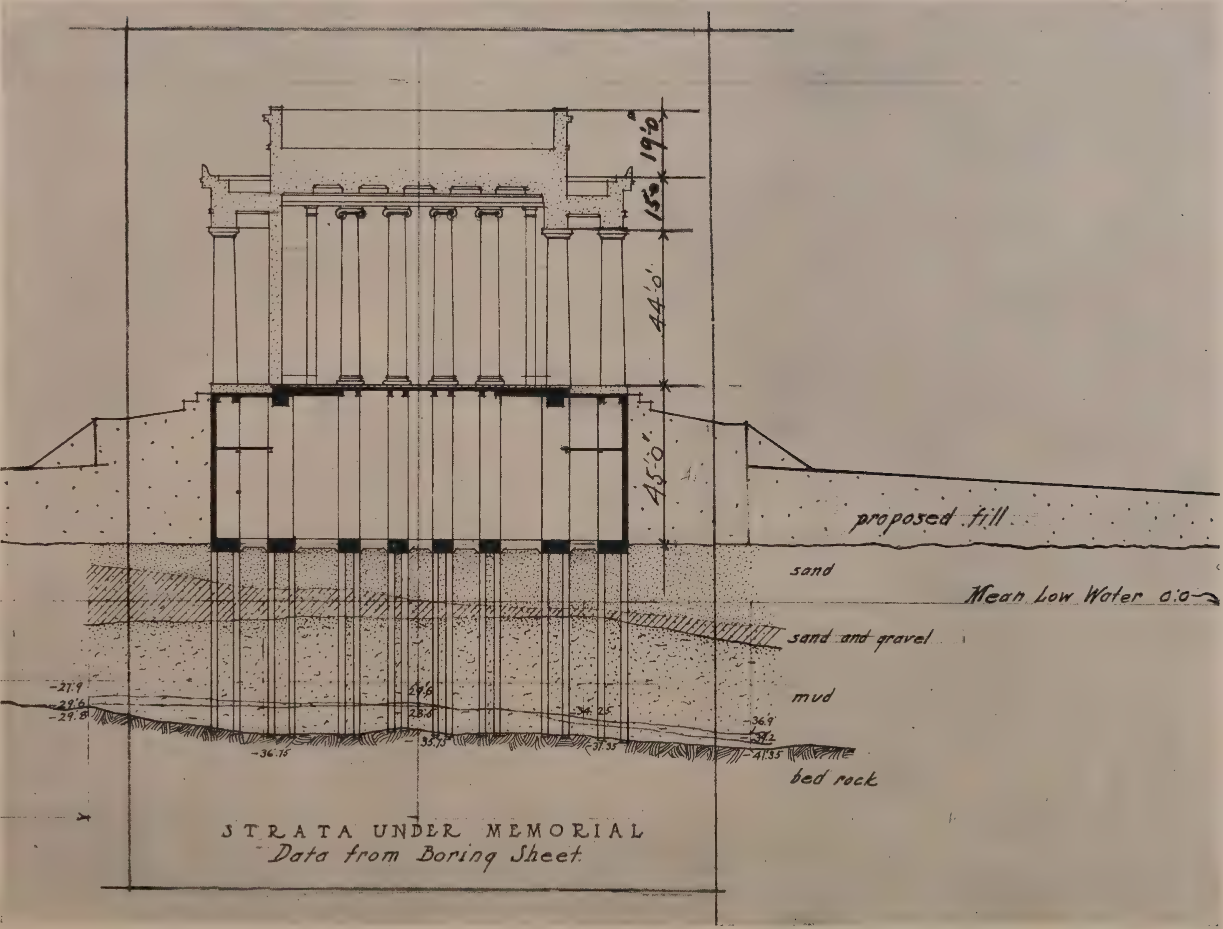
Plans for the eventual formation of an Architectural Club to take in all branches of athletic, social and educational activities are under consideration and a report will be made at our first meeting early in September with recommendations regarding same.

Our Official Schedule and Year Book will be issued in October as usual and we trust that this early notice will give our advertisers time to prepare more elaborate cuts and striking ads than the extremely short notice of last year permitted.

We wish all our members and friends in the Architectural profession a very enjoyable summer and look forward to the fall when we will all meet again to continue the wonderful spirit of fellowship which has been so manifest during the past season.

OUR SLOGAN

The Furtherance of Good Fellowship in the Architectural Profession.



Details of Construction—Foundation of Lincoln Memorial, Washington, D. C. Henry Bacon, Architect.

THE FOUNDATION OF THE LINCOLN MEMORIAL AT WASHINGTON

THE many interesting drawings and sketches made by Henry Bacon as a draftsman caused us to limit the illustrations accompanying the article upon him and his work, to drawings made by him personally. To Mr. L. J. Lincoln who, during twenty-five years was Mr. Bacon's chief assistant, we are indebted for a drawing of the section of the Lincoln Memorial. This drawing is reproduced at small size below and a portion of it is shown at almost the scale of the original on page 74.

Mr. Lincoln was the responsible assistant in full charge of the constructional design of the Lincoln Memorial at Washington and to him is due the following notes regarding the foundations. It is important in this connection to remember that the site upon which the memorial stands was originally covered with water which spread out from the Potomac river forming at times a small lake.

"The site of the memorial originally covered with water was later filled in to an elevation 16′-0″ above the low water level. But rock was found at elevations varying from 45 to 57 feet below the level of the fill. The memorial is supported on 152 steel cylinders filled with reinforced concrete. These cylinders vary in length from 45 to 57 feet and in diameter from 3′-0″ to 5′-0″.

"The cylinders were sunk into the bed rock 3′-0″ to provide anchorage at the bottom and were tied together at the top to resist the lateral pressure produced by the earth fill around the memorial.

"The upper foundations between the then existing grade and stylobate of the memorial are 45′-0″ high and were constructed of reinforced concrete."

BUILDING INDUSTRY IN SOUND CONDITION, AUTHORITIES STATE

EXCEPT in New York City the present indications do not point to any likelihood of over-expansion in the building industry. This is the situation summed up by the Guaranty Survey published by the Guaranty Trust Company of New York, in which it is shown that building conditions are generally sound. "In spite of the high level of building activity which has been maintained for more than two years," states the Survey, "it is evident that an appreciable part of the shortage resulting from the relative inaction of the war period still remains . . . . . a dearth of structures for the country as a whole is still apparent."

In comparing the 1923 building figures with those of 1922 the Survey points out that "it is doubtful, in view of the higher costs represented and the amount of construction known to have been postponed or abandoned, whether the actual work undertaken was equal in volume to that of the preceding year (1922)."

ARCHITECTURAL TENNIS TOURNAMENT

A TENNIS tournament will be held this summer in which nearly all the most prominent offices in New York will be entered. At a meeting held last Monday night the following committees were appointed:

Executive Committee
- A. F. Darrin, Chairman—Holmes & Winslow.
- M. S. Dimmock, Vice Chairman—McKim, Mead & White.
- E. S. Marotte—Donn Barber.
- J. S. D. Williams, Sec'y to Comm.—Delano & Aldrich.

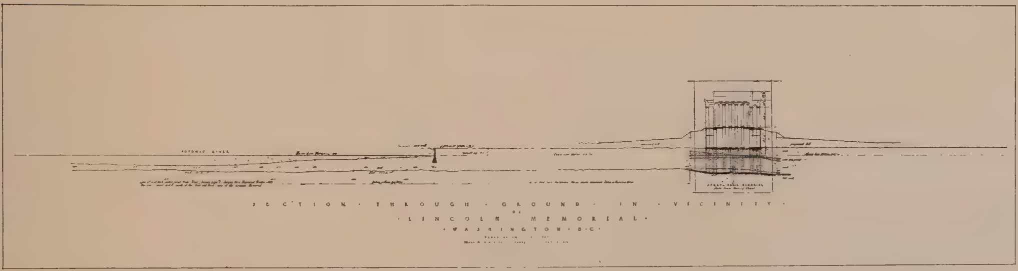
Schedule Committee
- D. M. Plumb—Walker & Gillette.
- Paul Singer—Warren & Wetmore.
- E. S. Marotte—Walker & Gillette.

Publicity and New Members
- Donald M. Campbell.

A schedule will be shortly arranged and it is expected that the tournament will be in full swing about June 1st.

Mr. William A. Delano of Delano & Aldrich has donated two cups and it is expected that some rare battles will be fought over the net before the cups are finally awarded. Any architectural draftsman in the City of New York will be eligible to enter the contest, and it is requested that any one who so desires to enter the contest get in touch with the Secretary, Mr. Williams, at the earliest possible moment, so that he may be placed in the schedule.

The following offices have made entry up to date:
Delano & Aldrich, Dwight P. Robinson, Donn Barber, A. S. Bossom, Kenneth Murchison, Archt'l Dept. Board of Education, Schwartz & Gross, Holmes & Winslow, Alfred Di Blasi, Wm. F. McCulloch, Walker & Gillette, Carrere & Hastings, Helme & Corbett, York & Sawyer, McKim, Mead & White, Robert J. Reilley, Moran, Maurice & Proctor, Warren & Wetmore, Andrew J. Thomas, W. L. Stoddart, Penrose V. Stout, Alfred Hopkins, Peabody, Wilson & Brown, Fellheimer & Wagner, Maynicke & Francke, Benjamin Morris and John Russell Pope.



Section Through Ground in the Vicinity of the Lincoln Memorial, Washington, D. C. Henry Bacon, Architect.

SAINT LOUIS ARCHITECTURAL CLUB

THURSDAY evening, May 1st, was the date of the installation ceremonies for the newly elected officers in the St. Louis Architectural Club. Dinner was served at 6:30, in the Clubhouse, with Mr. Oscar Mullgardt, a past president of the Club, presiding.

The principal speaker of the evening was Col. Francis M. Curlee, a prominent member of the St. Louis Bar, who gave a scholarly address on the subject of, "Thomas Jefferson, Statesman and Architect."

Mr. Mullgardt then called upon Mr. Clemens Nicholas, the retiring president, for his farewell talk. This was followed by the reports from the various committees for the past year, and these were given in entertaining fashion. The presiding officer appointed Messrs. Hugo K. Graf and Ray Leimkuehler, both past presidents of the Club, to escort the newly elected officers to their proper places.

At the conclusion of his talk, the new President, John A. Bryan, made the suggestion that the Club arrange for a pilgrimage to Jefferson City, the Capital of Missouri, this event to take place on July 4th, a date forever linked with the name of Thomas Jefferson. The idea was enthusiastically endorsed and Charles M. Gray was appointed Chairman of the Arrangements Committee for the trip.

In preparation for this event, the principal feature on the program for the next meeting of the Club, on May 15th, will be a talk by Hugo K. Graf, of the architectural firm Trueblood & Graf, on the subject of the new Capitol at Jefferson City which is acclaimed one of the most successful buildings of that character in the United States. This building was designed by Messrs. Tracy and Swartwout of New York and has only recently been completed. The sculptured pediment by Stirling Calder was unveiled only this year, and the magnificent mural decorations from the Brangwyn Studio in London were put in place a few months ago. The Legislature of Missouri appropriated $700,000.00 for the interior decoration of this building, which is said to be the most liberal appropriation made by any state Legislature for such a purpose.

Mr. Graf is thoroughly conversant with the plans and details of this building.

TEACHING FELLOWSHIP IN ARCHITECTURE
1924-1925

THE Department of Architecture of the Pennsylvania State College at State College, Pennsylvania, offers to a qualified graduate student of an approved architectural school, a teaching fellowship in architecture. The holder of this fellowship is granted $800.00 annually, in return for which he is required to give a limited amount of instruction under supervision. Ample time for the pursuit of at least one-half of the required work of a Masters' Degree in architecture is allowed, and the incumbent's programme of graduate study is given precedence over that of his work in the under-graduate department which he is serving. He is also exempted from all College fees. Inquiries and applications should be addressed to: The Department of Architecture, The Pennsylvania State College, State College, Pa.

ARCHITECTURAL CLUB OF INDIANAPOLIS

THE Architectural Club of Indianapolis, which was organized in 1911 and disbanded during the War, has been reorganized. The membership includes architects, draftsmen and members of the allied arts. Weekly luncheon meetings with speakers have brought the men together and held their interest.

The monthly supper is followed by a lecture on some subject of professional interest.

Courses in Engineering and Specification writing, sketching, water color and the Beaux Arts projet are planned as part of the Club's activities.

The officers of the Club are, R. Karl Galbraith, President; George Caleb Wright, Vice-President; Samuel E. Becker, Secretary; Edward J. Clements, Treasurer.

The Club will be glad to receive notices of competitions of all kinds. Representatives of companies manufacturing or producing building materials who can arrange to give lectures on their product will please communicate with the Secretary. Address all communications to Samuel E. Becker, No. 21 Virginia Avenue.

Design for Program for "A Night in Seville."

BOSTON ARCHITECTURAL CLUB

THE school season of the Boston Architectural Club for 1923-24 closes May 31st, most auspiciously with the winning of the Rotch Travelling Scholarship by Mr. Eugene F. Kennedy, Jr., the youngest man yet to achieve this distinction and one who is solely the product of the Club's Atelier, with no college nor other school affiliations. The Club system of "After-Office-Hours" instructions from whence eleven of the last nineteen Rotch winners have come, is singularly fortunate in the close proximity and the generous and hearty co-operation of both Harvard and Technology Architectural Schools.

The social activities of the Club have been well attended and the Annual Costume Party, "A Night in Seville," an occasion to be remembered.

The "1923 Book" of the Club was the most successful yet published and has given the architectural profession of the country a keen interest in, and appreciation of the work the Club is endeavoring to do.

BROOKLYN CHAPTER A. I. A.

THE Brooklyn Chapter of the American Institute of Architects has planned an extensive educational program directed towards the recognition, education and assistance of the architectural draftsmen and students in its territory.

The plan as worked out is very wide in its scope and shows the result of careful study of the problem by the Committee on Education, of which Lester B. Pope is Chairman.

EUGENE F. KENNEDY WINS ROTCH SCHOLARSHIP

THE Rotch Scholarship has been won by Eugene F. Kennedy. Reproductions of Mr. Kennedy's drawings will appear in the next issue of PENCIL POINTS. The subject of the competition was "A Monument to the Establishment of Perfect Peace."

THE ORGANIZATION OF HOLABIRD & ROCHE

THE photograph of the organization of Holabird & Roche reproduced on page 78 was taken on the partially wrecked site of Section A of the new Palmer House, one-half block from their office, upon which the new twenty-three-story Palmer House will be erected. The members of the firm and the drafting room force are:

Martin Roche, E. A. Renwick, John A. Holabird, John W. Root, H. B. Hackett, Members of the Firm. Chief Draftsman, F. B. Long; General Supt., F. M. Carroll; Asst. Mgr., W. D. Foy; Structural Engineer, F. E. Brown. Other members of the organization are: George McArthur, W. A. Bodeen, Thomas Ford, Louis Brodhay, Walter Sandstrom, Neil Shannon, John Smith, Gustave Reinhardt, Chas. Bellas, G. C. Rennie, A. L. Sommers, C. G. McTaggart, L. Gerard Burroughs, W. C. Baughman, S. A. Lichtmann, C. D. Marshall, A. B. Schmitz, W. E. Laidley, Duane M. Howard, H. J. B. Hoskins, Frank T. Medall, Richard McP. Cabeen, J. F. Winkler, Howard Vader, R. A. M. Anderson, M. L. Kroman, A. J. Wills, August Littre, Richard Grippi, Henry Buchi, H. A. Kennison, Raymond F. Jensen, H. C. Van Dyke, Frank Paterson, F. L. Sutherland, Sidney Anderson, W. Andrews, Leslie Larson, Fred Guy, F. A. Byrne, Walter Frazier, A. W. Ross, Gilbert Hall, Benj. B. Shapiro, H. A. Miller, H. O. Newberg, F. H. Schuenan, K. V. Jurgens, Clyde Thompson, A. J. Wills, H. E. Armann, Julian Frank, N. Martynoff-Colonno, Norman Bueter, James Hudson, Wm. J. Green, C. E. Nordquist, Arthur Rose, R. L. Kelly, Sam Novak, S. E. Berkenblit, L. E. Harville, V. O. McClurg, Fred Wilbur, H. E. Kingsley, F. R. Washburne, A. T. Tumbleson, W. B. Grey, P. H. Lund, Henry Ellsburg, A. M. Korsmo, Alfred Vogger, S. J. Chakow, N. L. Van Taack, L. K. Lewis, David Carlson, H. A. Lightbody, Edmond Cieslik, E. J. Smith, H. F. Koepke, D. P. Fleming, A. S. Brock, H. E. Jacobsen, R. R. Rauh, B. M. Einhorn, Wm. Peller, E. E. Elliott, J. E. Schwarz, A. H. Brewer, L. S. Gaston, Chas. Frogner, L. A. Whipple, Richard Neutra, Herbert Preuss, G. J. Kandzie, C. Leuderman, John R. Macas, Leroy Ziegele, Robert McArthur, M. C. Barnes, C. E. K. Rabig, Walter Conley, A. De Luca, Harford Field, H. S. Konold, Jack B. Smith, B. Pellina, Geo. D. Conner, R. P. Cortis.

ON THIS page are shown, at reduced size, two of the key drawings for program covers for the architects' May Party at the University of Michigan. These drawings were made in the design classes under the direction of A. G. Pelikan, Instructor in Drawing and Painting.

THE HUMAN ELEMENT IN THE ARCHITECT'S ORGANIZATION

FROM a reader of PENCIL POINTS we received the following letter in response to our invitation to our readers in general to write us their observations and opinions on this subject. The incidents related in this letter give several interesting views of life in the drafting room. We hope that we may have many other letters on this subject. Send them along.

After reading your editorial and the symposium which follows on "the human element in an architect's organization," one receives the impression that the absence of this element has been unduly stressed.

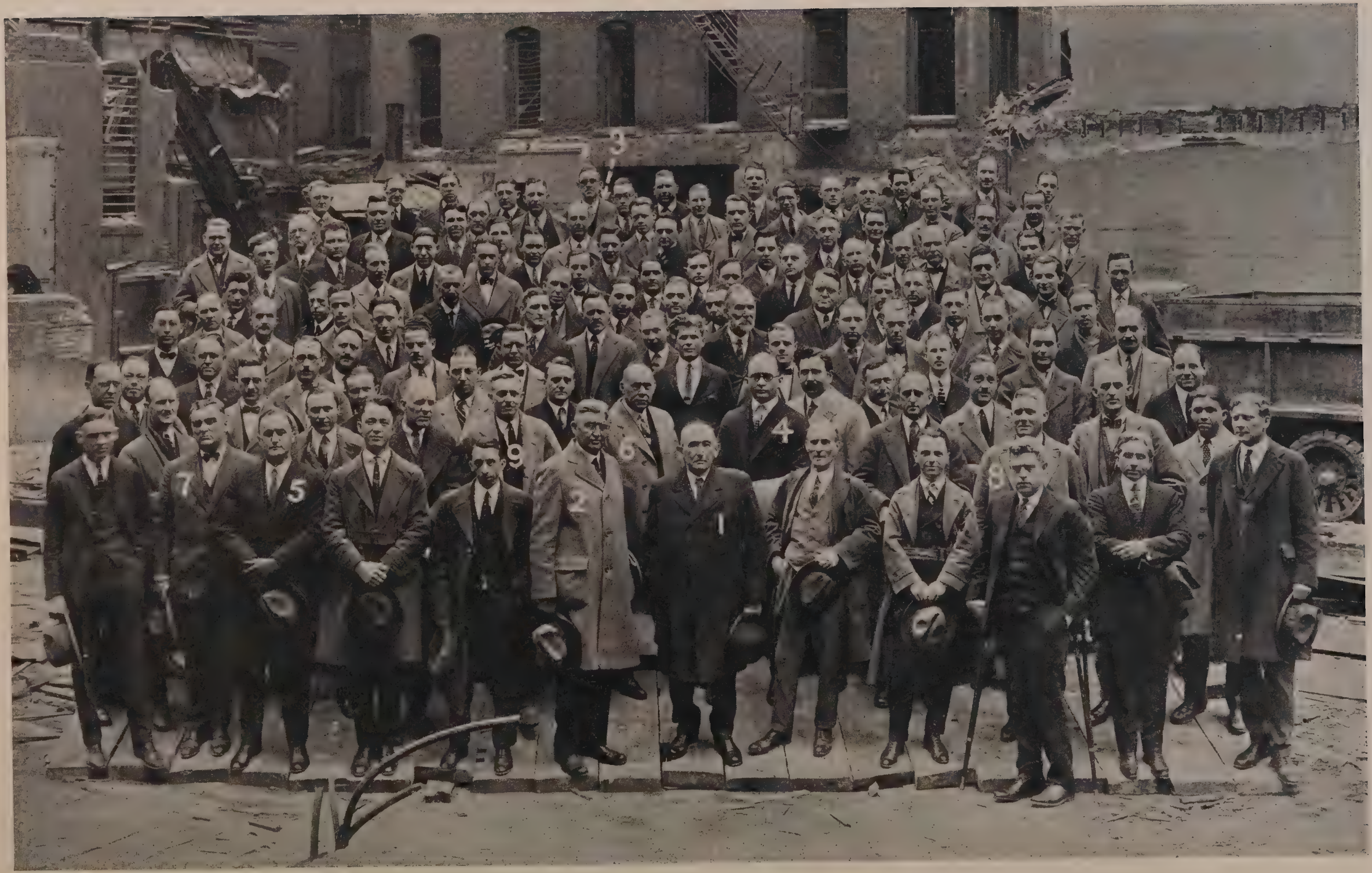
Your symposium takes on the nature of a confessional at which the contributors, while absolving themselves, half admit that there is something wrong, at the same time expressing a wish that it might be otherwise. This is all very well and can not help but clear the way for a better understanding. But while we are at the festive board, and before our symposium shall have closed, permit me to present a few slides from the stereoptican of a retrospective mind, which will illustrate the human element in architect's offices as I have observed it from the draftsman's point of view, and at the same time let me point out that my object is to show that this element of human interest is more prevalent that is commonly supposed.

In the early nineties, when I was a very young man, I left my home in what we now call 'the middle west,' and went to New York. I was fresh from school, and had experienced a brief period in an architect's office as a student—though my duties were chiefly that of an office-boy.

I was looking for a job, and went the rounds of the larger architect's offices in New York City which at that time were comparatively few in number. I did not always reach the inner sanctum, but I recall very distinctly an interview with Mr. Thomas Hastings, who gave me of his time and kindly advice in a delightful little talk at a busy hour in the morning. Remember that I was to him a strange young man, without letters of introduction or recommendation of any kind. And while I grant you that to Mr. Hastings it was but a casual occurance which meant little or nothing at the time, to me it was a helping hand, and I left him with a pleasing impression of his charming personality, and distinctly encouraged by his sound advice. Please mark, if you will, the human element in this little incident.

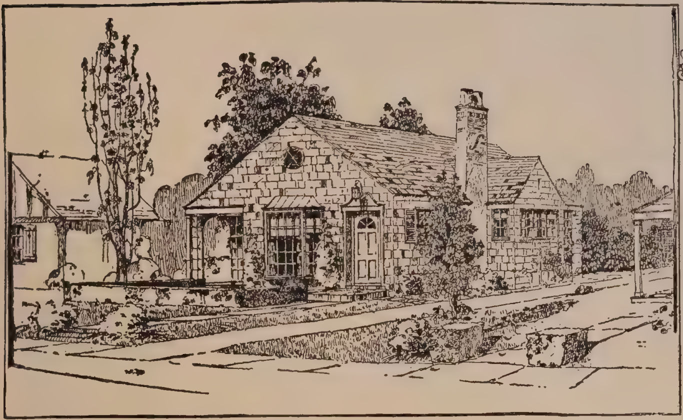
The courtesy and consideration I met with in Carrere and Hasting's office was characteristic of such offices

(Continued on page 79)

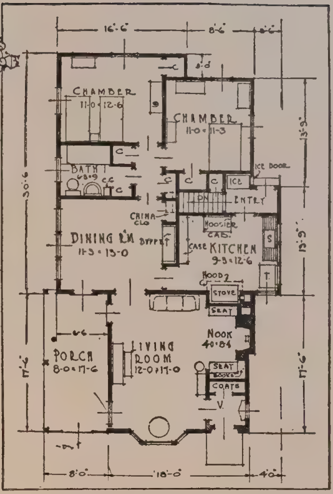


The Organization of Holabird and Roche, Architects, Chicago, Ill.

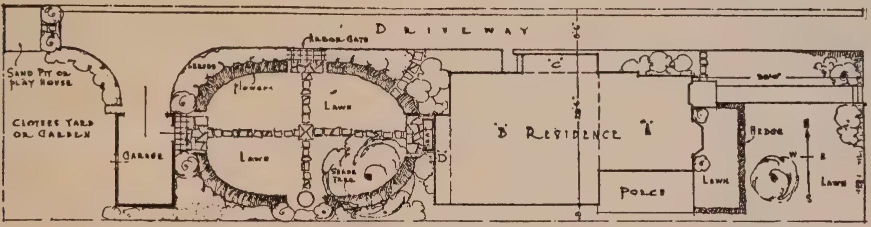
1. *Martin Roche,* 2. *E. A. Renwick,* 3. *John A. Holabird,* 4. *John W. Root,* 5. *H. B. Hackett,* 6. *F. B. Long,* 7. *F. M. Carroll,* 8. *W. D. Foy,* 9. *F. E. Brown.*



Courtesy of the Indianapolis News.



FLOOR PLAN



Landscape Plan.

Above is shown the design by Harry L. Wagner, Kansas City, which won the first cash prize of $250 in the competition conducted recently by the Indianapolis News in co-operation with the Architects' Small House Service Bureau, Lakes Division. Herbert Foltz, as architectural advisor, directed the competition.

THE HUMAN ELEMENT IN THE ARCHITECT'S ORGANIZATION.

(*Continued from Page 77*)

as that of George B. Post, Richard M. Hunt, Bab Cook and Williard, and Clinton and Russell—to mention but a few. In each instance I stated my case with the naiveté of a youngster of twenty-one, and parenthetically I might say that popular opinion to the contrary notwithstanding, architects, I have found, are quite human. Perhaps it was my presumption in essaying to land a job in New York with my limited knowledge and experience which appealed to their sense of humor.

Be that as it may, the surprising thing happened, and I succeeded in securing a position with a well known firm in whose employ I remained for over five years.

As I look back on the period spent in this office, I recall it as a very happy experience. It was not a large office, and my recollection is that the force in the drafting room seldom exceeded a dozen men. Except during rush periods I should say that there were perhaps eight men who would be considered as privileged members of this joyous family. And by privileged members I mean merely that these men were made to feel that their jobs were not dependent on the rise and fall of the demands of clients.

In this office there existed a very close and intimate relation between the members of the firm and "the boys in the office." Each member of the firm had a table reserved for his use in the drafting room, and each, while in the drafting room was distinctly "one of the boys;" though I do not recall that there was the slightest disposition on our part to take advantage of the situation, or to dispense with the tacit understanding that there was a limit to the freedom from restraint which we all enjoyed.

It was in such an atmosphere we worked, and I have never known of an office where there was such a happy spirit of co-operation between architects and their men in the office.

Many incidents come to mind which bring out the fact that the human element existed in this office to a marked degree. I very well remember a particular time when there was a sudden rush of work in the office, and several new men were taken on. One of those who at this time drifted into our midst was a sort of human derelict, and I think the most unique specimen I have ever known.

It was something of a shock to our sense of the fitness of things when he appeared among us the first morning in a frock coat, well worn and shiny from frequent applications of the whisk broom, a top hat, somewhat battered from many encounters, and trousers that fitted rather too well, and that were unquestionably frayed about the edges. With it all he carried a cane He was a man approaching sixty, and wore a full beard precisely parted in the middle. His manner was extremely nervous and rather apologetic. As an architectural draftsman he was a decided misfit, and he had been in the office but a short time when it became quite evident that in this capacity he would be a hindrance rather than a help.

Notwithstanding his rather deprecating manner, he took his work at the drafting table quite seriously, considering it important and all that it should be. I have not a very clear idea of just what his capabilities were, but I recall strange, microscopic numerals that he used in figuring floor plans, and little inconsequential notations that appeared scattered indiscriminately over his drawings.

As was inevitable, he was the butt of the younger element in the office, and of course practical jokes at his expense were of frequent occurrence. He was not, as far as we could see, a dissipated man; and if it had been the common situation of a man "down and out" with no one to blame but himself his case would not have been so appealing. As it was, he was just a pitiful example of one of those helpless individuals who drift through life, never finding out just where they belong, and who blunder on to the end.

He was hired to perform a certain task, and paid a substantial salary for his services; it followed that when he proved himself incapable, it was quite in order to let him go. Yes, provided you ignore "the human element in an architect's organization." As a matter of fact the man was retained in this office for several weeks, and every effort made to make it easy for him to find other employment.

Let me briefly sketch in outline another incident that happened in this same office. One of the younger men had been asked to prepare plans for a country club that was contemplated for a nearby suburb in New Jersey. It was one of those "hit or miss" competitions that were quite common in those days—we sometimes hear of them now—and several embryo architects were trying their hand at it. One of our firm discovered that he was working on it, and contrived to inform the chief draftsman of what was going on with the suggestion that possibly this boy would like some help; in which case the office must get behind him and see it through.

The young man—who by the way was a very capable fellow—soon learned that the office facilities were at his disposal after office hours, and with the help of several members of our little architectural family the drawings were gotten out on schedule time, and happy to relate, he secured the job. Again, please note, if you will, the human element in this little incident.

Some years later I was in the employ of an architect who had just won a competition of considerable importance, representing a substantial commission. He is a man who has since won an enviable reputation for himself, and is well known throughout the country, but at that time he was comparatively unknown, even in New York; and furthermore having limited means he was forced to run his office accordingly.

After disposing of the preliminary work of this competition, it became necessary for him to reduce his office force, and as is frequently the case, the last man taken on was logically the first man to let go. This particular fellow, however, was a very likable chap, and with it all thoroughly competent; and, as it happened, had just been married. This fact was casually mentioned by myself to the boss one day in the course of a conversation in the drafting room. It appeared that he had already told this man that he would have to dispense with his services; and then he suddenly changed his mind, and decided to keep him on indefinately. Again the human element.

Then there is another architect who is eminently successful in the practice of his profession. Your readers are familiar with his work, which is always marked by exquisite individual taste, and a masterful grasp of architectural composition.

Years ago he had a comparatively small office force which has since grown into a large organization; but some of the boys who were with him during his early practice, and have now grown to manhood are with him today, and incidentally they could tell you far better than I, how much they owe to his genuine interest and material help in securing their architectural education and training.

I wish I might quote from a letter written by this architect to a young man in reply to an inquiry as regards the solution of an architectural problem which was presented to this same young man at a time when he was very inexperienced. The letter, written in long hand, is before me, and while brief is very much to the point, and evidently prompted by a sincere desire to be of real assistance. It is a striking example of what I am sure is of frequent occurrence, and is but another instance of the human bond which exists between architects and the men associated with them in their work.

No, the human element is very much in evidence in architect's offices, if I am to judge by what has come under my personal observation. There is, I suppose, the "plan factory," and I have heard of the pestiferous pill, who, wrapping himself in the cloak of an "artistic temperament," makes his drafting room abhorrent to his employees. But of these things I know very little from personal contact.

Mr. Goodhue's contribution to your symposium is, I think, a fair sample of the real feeling among the greater number of our practicing architects, and one has only to read between the lines to find how very human that feeling is.

One can readily understand how very essential "the human element in an architect's organization" is, and where it does not exist one has the feeling that the man who is primarily responsible is getting only his just deserts; which in other words means a half-hearted interest in his work on the part of his subordinates.

My own experience would lead me to the belief that capable and competent architectural draftsmen naturally and inevitably gravitate toward congenial environment, and sooner or later your "rolling stone"—if he has the right stuff in him—will find his particular niche, where the human element will take care of itself.

WELL, Architect L. Rodman Nichols of Schenectady got action from a little advertisement inserted in Pencil Points for a draftsman. He not only got the man he wanted, from Maryland, but also had applications from as far south as Alabama, west from Dakota and east from Massachusetts.

Who says Pencil Points isn't a grand paper?

UNIVERSITY OF MICHIGAN SUMMER SCHOOL

THE Architectural School of the University of Michigan is again to conduct summer classes in architectural design, drawing and painting for architectural and art students, and classes in industrial design for teachers of industrial arts.

Courtesy of Regolado

William de L. Dodge and his artist daughter. See other photographs on Plate XXIV and Page 81.

PERSONALS

William C. Presto, Architect, has removed his offices to Suite 1715, Burnham Building, 160 North La Salle Street, Chicago, Ill.

Paul W. Hofferbert, Architect and Engineer, has opened an office for the general practice of architecture and engineering at Florence, Ala.

Bagg and Newkirk, Architects, have removed their offices to 255 Genesee Street, Utica, New York.

H. L. Fetherstonhaugh, Architect, has removed his offices to 374 Beaver Hall Square, Montreal, Canada.

Marks & Kann, Architects, have removed their office to 703-4 Home Trust Building, Pittsburgh, Pa.

Gibb & Waltz, Architects, have removed their offices to Ithaca Savings Bank Bldg., Ithaca, N. Y.

A. F. Gilbert, Architect, has removed his offices to 358 Fifth Avenue, New York.

F. P. Platt & Bro. have removed their offices to 221 West 57th Street, New York City.

Ernest H. Fougner, Architect, has removed his offices to 197 Market St., Newark, N. J.

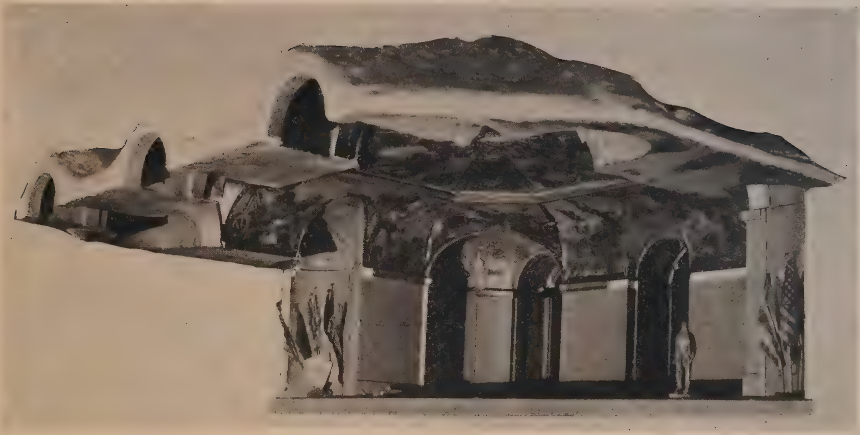
Samuel J. Horn, Architect, has opened an office at 222 Delaware Trust Bldg., 9th & Market Sts., Wilmington, Del.

T. Markoe Robertson has been admitted to partnership with John Sloan, Architect, under the firm name of Sloan and Robertson, with offices at 1 Pershing Square, New York.

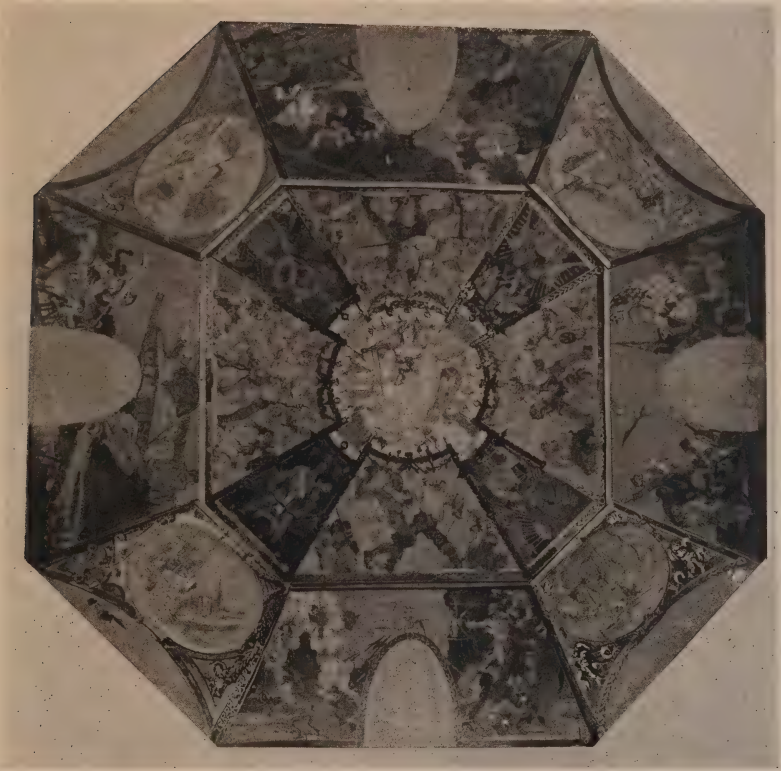
George W. Yohe, Architect, has removed his office to Landefeld Building, 235 Main Street, Monongahela, Penn.

Bronson V. Gamber, George S. Fleming and John F. Briskey have been admitted to the firm of Brown & Derrick, Inc., Architects, as associate members, with offices at 120 Madison Avenue, Detroit, Michigan.

J. V. Wilson, of the firm of Wilson & Mitchell, Architects, Pittsburgh, will give a course in architectural design and outdoor sketching at the Summer School of Carnegie Institute of Technology, from June 16th to July 26th.



Plaster Model of Room Showing Mural Decorations.



Two-inch Scale Study

Mural Decorations for the Flag Room in the New York State Capitol, at Albany, N. Y., by William de Leftwich Dodge.

HERE *and* THERE *and* THIS *and* THAT

Conducted by RWR

WE HAVE now reached that stage in our development where we want an attractive and appropriate heading for this department and there is a chance for some bright Pencil Pointer to come across with a design that will serve to make "Here and There and This and That" even more famous than it has already become. The heading should contain the words "Here and There and This and That" conducted by R. W. R. The design may be straight lettering or the words may be enclosed in a border. The drawing should be made so that it will reduce to 6½ inches wide by 1 inch high, may be in pencil, pen and ink or any other medium suitable for reproduction either in halftone or line.

A prize?

Why of course there's going to be a prize!

A complete set of the Pencil Points Library as published to date and the three numbers already issued of the Library of Architectural Documents—five books to add to the library.

The prize will be awarded for the best design received before July 4th. Open free to all whether a subscriber or not.

JOHN S. VAN WART is awarded the ten dollar prize for his amusing contribution published in the May number.

SOME people like to have nice things said about them—they are vain and human and all that sort of thing. A compliment brings a blush of pleasure to their cheeks and does them a lot of good.

Are we like that?

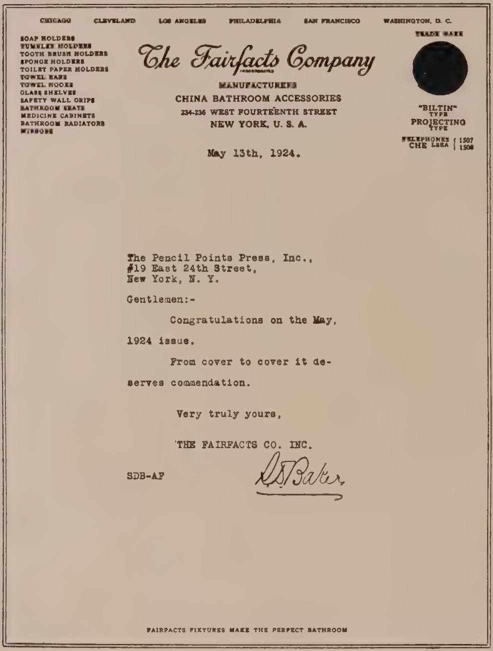
YOU BET WE ARE!

Would we walk a mile to hear something pleasant said about ourselves?

YOU BET YOUR SWEET LIFE WE WOULD!!

A lot of bouquets have been handed to us for the May issue of Pencil Points. Some are long and some are short and here is one of the short ones. We like it because Mr. Baker says we have accomplished exactly what we tried to do.

Thank you, Mr. Baker.



CHICAGO CLEVELAND LOS ANGELES PHILADELPHIA SAN FRANCISCO WASHINGTON, D. C.

SOAP HOLDERS
TUMBLER HOLDERS
TOOTH BRUSH HOLDERS
SPONGE HOLDERS
TOILET PAPER HOLDERS
TOWEL BARS
TOWEL HOOKS
GLASS SHELVES
SAFETY WALL GRIPS
BATHROOM SEATS
MEDICINE CABINETS
BATHROOM RADIATORS
MIRRORS

The Fairfacts Company
(INCORPORATED)
MANUFACTURERS
CHINA BATHROOM ACCESSORIES
234-236 WEST FOURTEENTH STREET
NEW YORK, U. S. A.

TRADE MARK
"BILTIN" TYPE
PROJECTING TYPE
TELEPHONES CHELSEA { 1507 1508

May 13th, 1924.

The Pencil Points Press, Inc.,
#19 East 24th Street,
New York, N. Y.

Gentlemen:-

Congratulations on the May, 1924 issue.

From cover to cover it deserves commendation.

Very truly yours,

THE FAIRFACTS CO. INC.

SDB-AF

S.D.Baker

FAIRFACTS FIXTURES MAKE THE PERFECT BATHROOM

HERE is a little sketch of G. Jervis Manton, of Melbourne, who has put Pencil Points on the map of Australia. He has put us in touch with a fine group of men, both architects and draftsmen. Maybe he needs a hair cut but what do we care? He has brought Australia and America more closely together.

G. Jervis Manton.

WE HAVE felt for some time that it would finally devolve upon us to decide the controversy which has been raging about Ray Hood's new building for the American Radiator Company, recently erected on West 40th Street, New York City.

Just as soon as this black shaft with the "Sunkist" crown appeared across the street from the New York Public Library, architects began to say things about it. They were all of a-twitter. Some did not like it and said so; others did like it and were equally frank in expressing their views. Conductors and motormen on the Fifth Avenue busses took up the controversy. The Orangemen, of course, were for it; the others against it, and the shillalahs were soon waving in the air. The flappers abandoned their customary pursuits and stood around in groups on street corners arguing for and against the merits of the new building. New York was in a hub-bub of excitement, which has not subsided yet.

Then we heard, through the underground, that Mr. Harvey Wiley Corbett was going to write a piece in the *Architectural Record* and settle the matter. And we felt relieved, but only for a moment as Mr. Corbett, after pirouetting gracefully over two pages of 10-point on a 12-point slug, says it is perhaps too early to express an opinion and leaves the decision to later generations.

This is not fair to Mr. Hood, to the American Radiator Co., to the architects, conductors or flappers. They should be put out of their misery now, and so here goes!

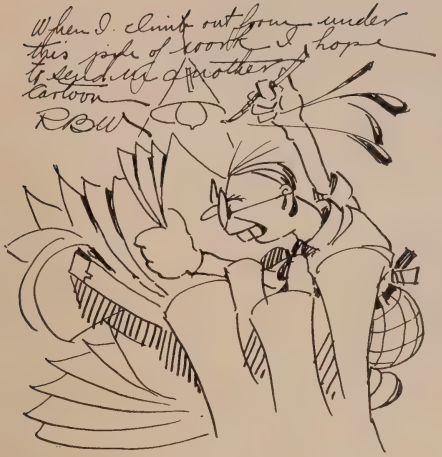
We are not an architect and so our opinion is utterly valueless and we are therefore giving it straight from the shoulder and with abandon.

We like the building; and so the matter is easily and finally settled. Some say it's all wrong because the black bricks were produced by "artificial" means. What difference does it make? Who cares whether the blackness was achieved by the addition of manganese or molasses or whatever they do add to clay or whether the bricks were dipped in shingle stain or otherwise treated?

Isn't terra cotta "artificially" colored? And how about tile and paint, and stucco and lots of other materials? Ray Hood wanted black brick and he got it. Why should the artist be circumscribed in securing the effect he wants?

We like the building and go out of our way to take a look at it whenever we get a chance.

NEXT!


When I climb out from under
this pile of work I hope
to send you another
cartoon
RBW

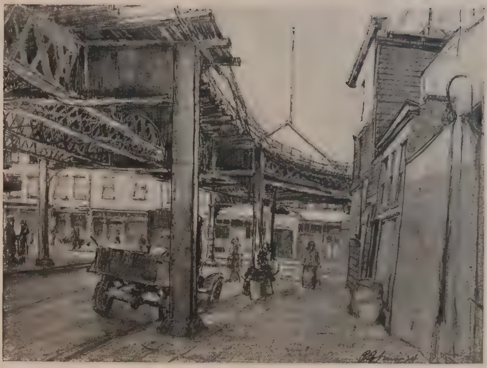
This Doesn't Need Any Caption.

ARCHITECT J. M. Berlinger, 469 7th Ave., N. Y. C., wants copies of PENCIL POINTS for June, July, September and November, 1922.

And The Rochester Mechanics Institute, Rochester, N. Y., E. E. Marks, desires a copy of March, 1923, to complete their files.

THE architects of Wisconsin have a keen appreciation of values. Mr. William G. Herbst, of Milwaukee, won title of champion bowler of the Milwaukee "Archies," and what do you suppose they gave him as a prize? We have it on the authority of Mr. Alexander C. Guth, Secretary of the Wisconsin Chapter, that they bestowed upon him a year's subscription for PENCIL POINTS. Congratulations, William!

THE University of Michigan, Ann Arbor, College of Architecture, will again conduct summer classes in architectural design, drawing and painting, also classes in industrial design for teachers of industrial art. Complete information may be secured from Prof. Emil Lorch, at the University.



"L" at 3rd St. and 6th Avenue.
Paul Bobinac, New York City.

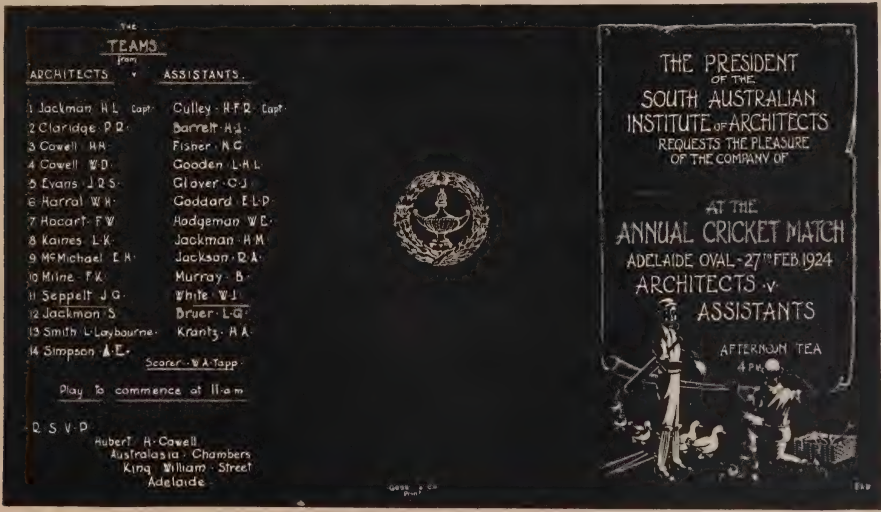
THIS month our sketchers have come to the fore in great shape (poets and jokesmiths seem to have gone on strike).

Here are the sketches.

SEVERAL of our readers who have been interested in the articles published in this department on the subject of filing plate material have asked us where they could secure suitable portfolios for this purpose. We have in mind the production of such a portfolio designed to accommodate such material and would like expressions of opinion as to the most appropriate size. Should the portfolio be 9 x 12 or should it be larger, say 11 x 14. Should it have a cloth cover on stiff boards or would tough fibre paper on boards serve the purpose? Our idea is an inexpensive portfolio with tapes and a one-inch bellows at the back which would accommodate about two hundred sheets.

What do you say?

WHILE on the subject of Australia we wish to acknowledge receipt of a bulletin published by the Architectural Atelier of the University of Melbourne, a live little paper showing some very nice drawings. We hope that some of these men will submit contributions for this department.



THE
TEAMS
from

ARCHITECTS v	ASSISTANTS.
1 Jackman H L Capt·	Culley · H·F·R· Capt·
2 Claridge P R·	Barrett· H·J·
3 Cowell H H·	Fisher N C
4 Cowell W·D·	Gooden L·H·L·
5 Evans J R S·	Glover · C·J·
6 Harral W H·	Goddard E·L·P·
7 Hocart· F W	Hodgeman W E·
8 Kaines L·K·	Jackman · H M·
9 McMichael E H·	Jackson · R·A·
10 Milne · F·K·	Murray · B·
11 Seppelt J G·	White W J
12 Jackman S	Bruer · L·G·
13 Smith L·Laybourne·	Krantz · H A·
14 Simpson A·E·	

Scorer · W A·Tapp·

Play to commence at 11·a·m

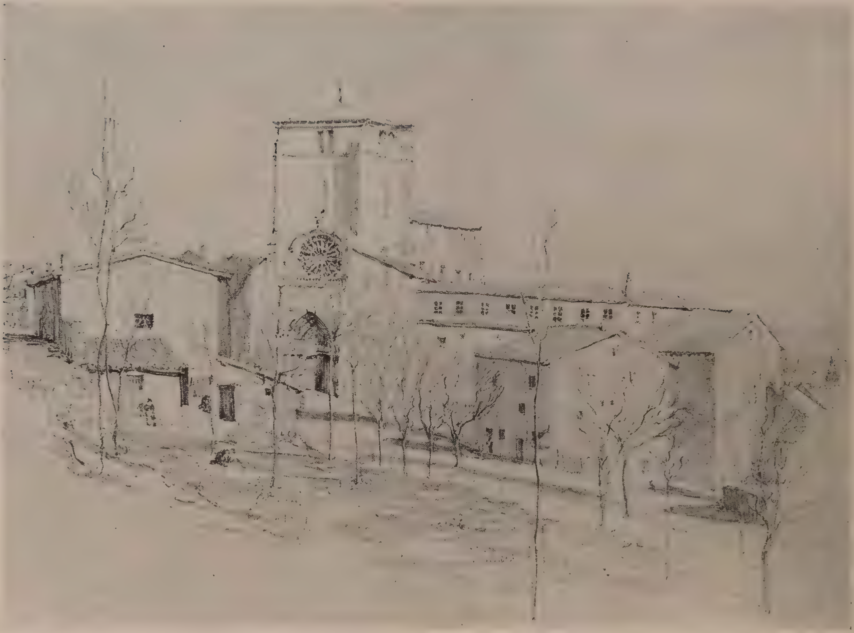
R S V·P
Hubert H·Cowell
Australasia · Chambers
King William · Street
Adelaide·

THE PRESIDENT
OF THE
SOUTH AUSTRALIAN
INSTITUTE OF ARCHITECTS
REQUESTS THE PLEASURE
OF THE COMPANY OF

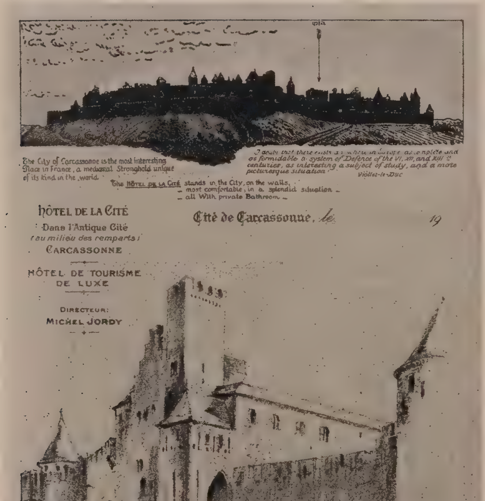
AT THE
ANNUAL CRICKET MATCH
ADELAIDE OVAL - 27TH FEB 1924
ARCHITECTS ·V·
ASSISTANTS

AFTERNOON TEA
4 PM.

Invitations Sent Out by the South Australian Institute of Architects for Their Annual Cricket Match.



Church of San Esteban, Burgos, Spain.
By William G. French, New York.



The City of Carcassonne is the most interesting Place in France, a medieval Stronghold unique of its kind in the world.

I doubt that there exists anywhere in Europe as complete and as formidable a system of Defence of the VI, XII, and XIII centuries, as interesting a subject of study, and a more picturesque situation. Viollet-le-Duc

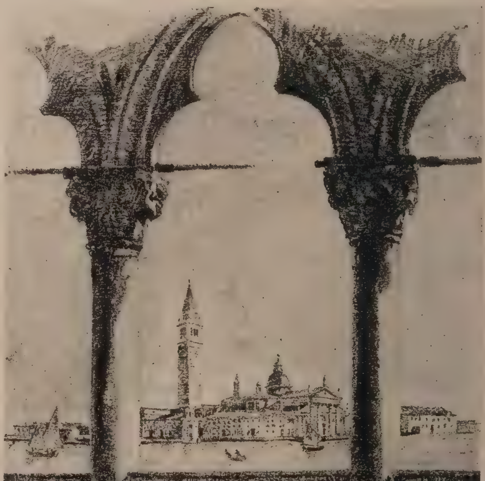
The Hôtel de la Cité stands in the City, on the walls, — most comfortable, in a splendid situation — all With private Bathroom —

HÔTEL DE LA CITÉ
Dans l'Antique Cité
(au milieu des remparts)
CARCASSONNE

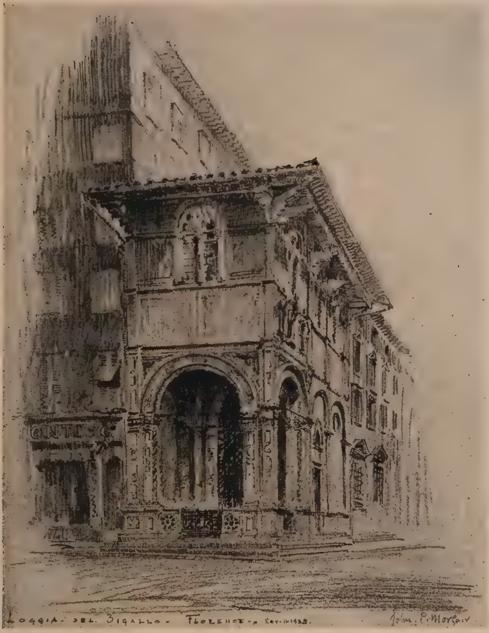
HÔTEL DE TOURISME
DE LUXE

DIRECTEUR:
MICHEL JORDY

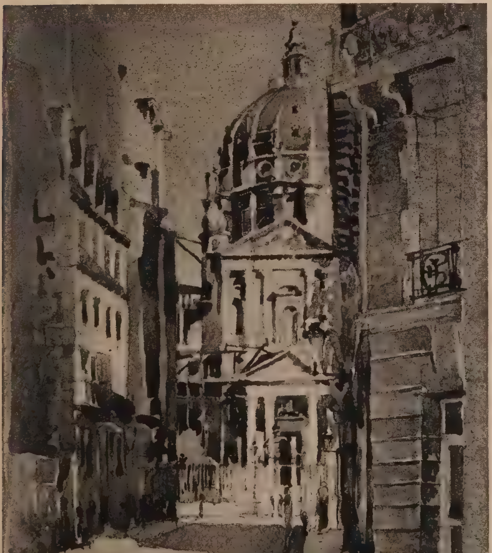
Cité de Carcassonne, le 19



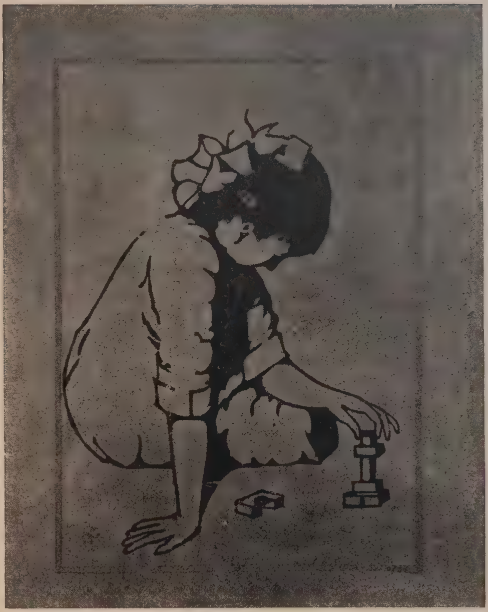
The two sketches above are from the sketch book of G. A. Rackell, New York.


LOGGIA · DEL · BIGALLO · FLORENCE · Nov. 11 1928.
John P. Morgan

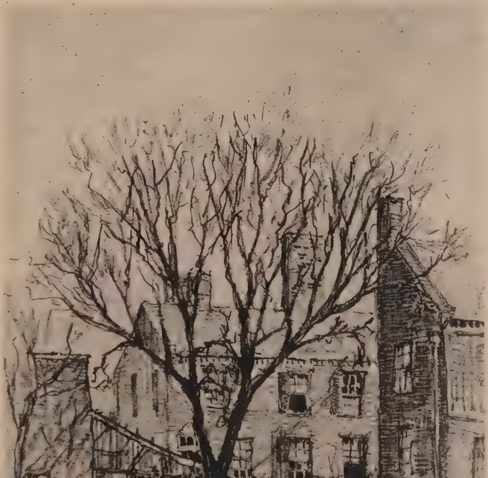
By John P. Morgan, Pittsburgh, Pa.



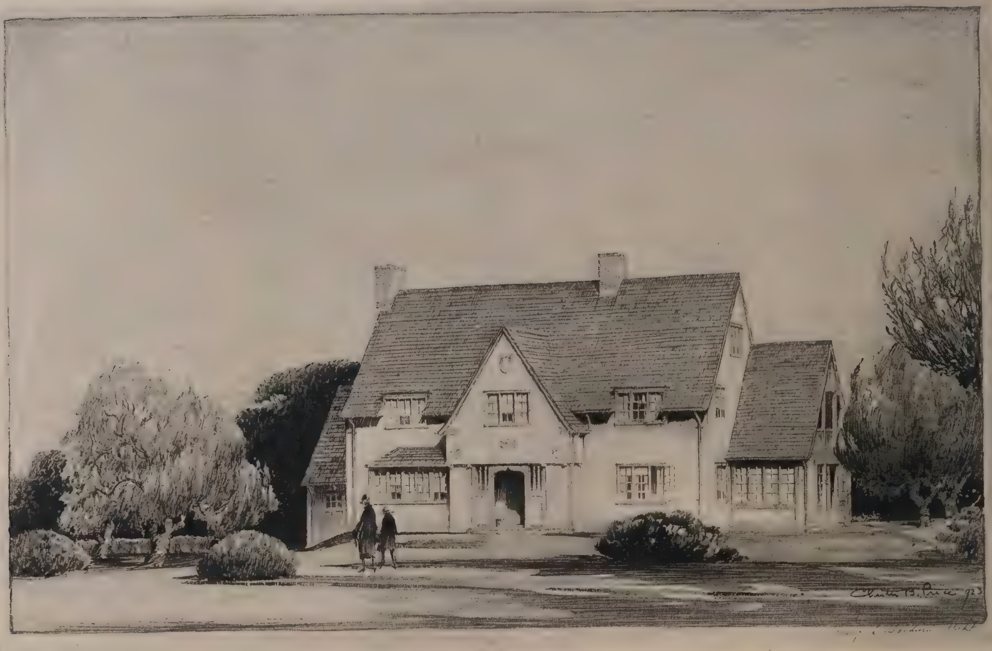
The Val de Grace, Paris.
H. Thearle, Univ. of Liverpool,
School of Architecture.



ARCHITECT and Pencil Pointer Natt Piper, of Long Beach, Cal., believes in conservation and utilization of by-products, etc. He even saves the envelopes in which he receives his copies of Pencil Points and does things with them. Here is a sample, a print from a wood block cut by him, done in warm brown with red border which is very attractive.

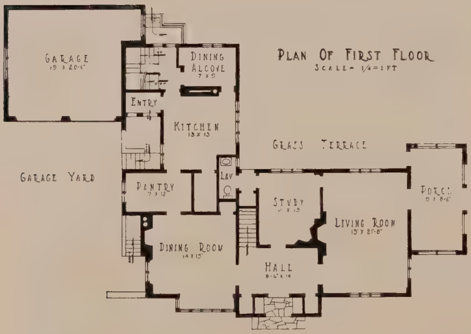


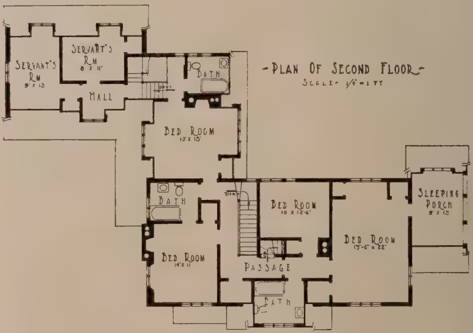
Old Buildings near the "Point," Pittsburgh.
R. Alex. Willson, Mt. Lebanon, Pa.



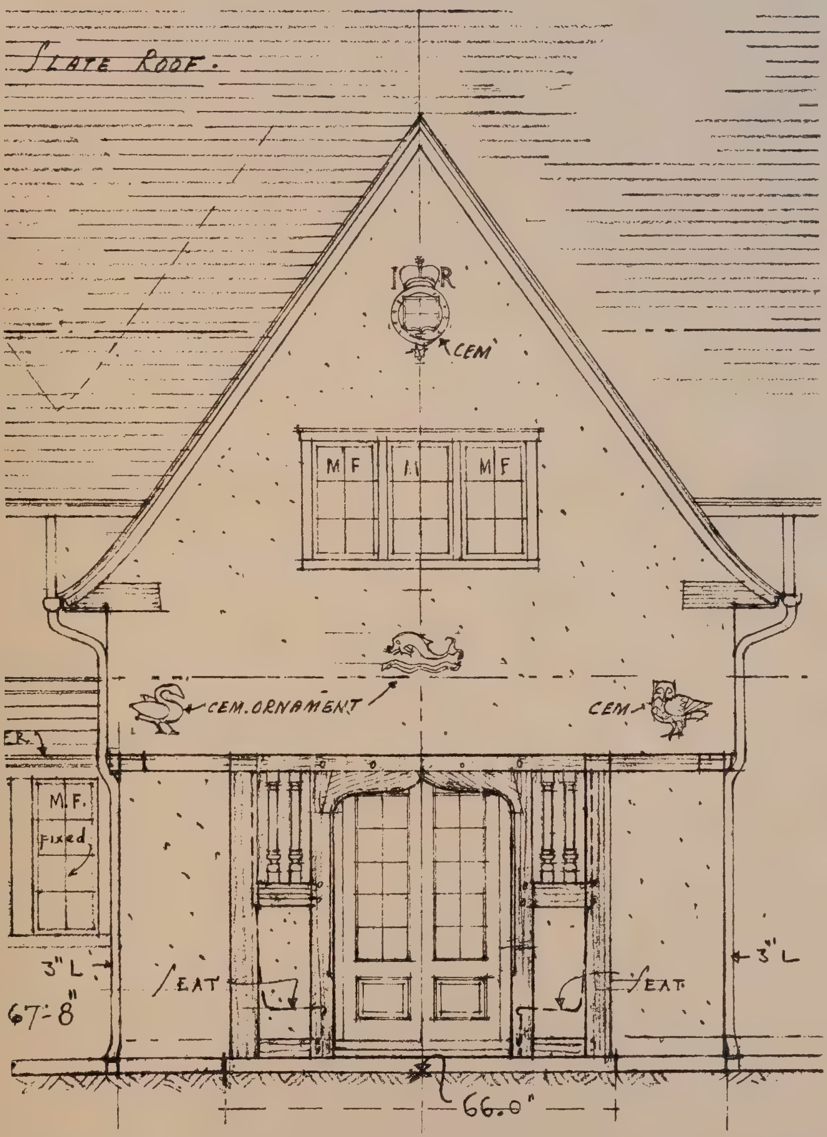
Courtesy of Skinner Bros.

Pencil Drawing by Chester B. Price.

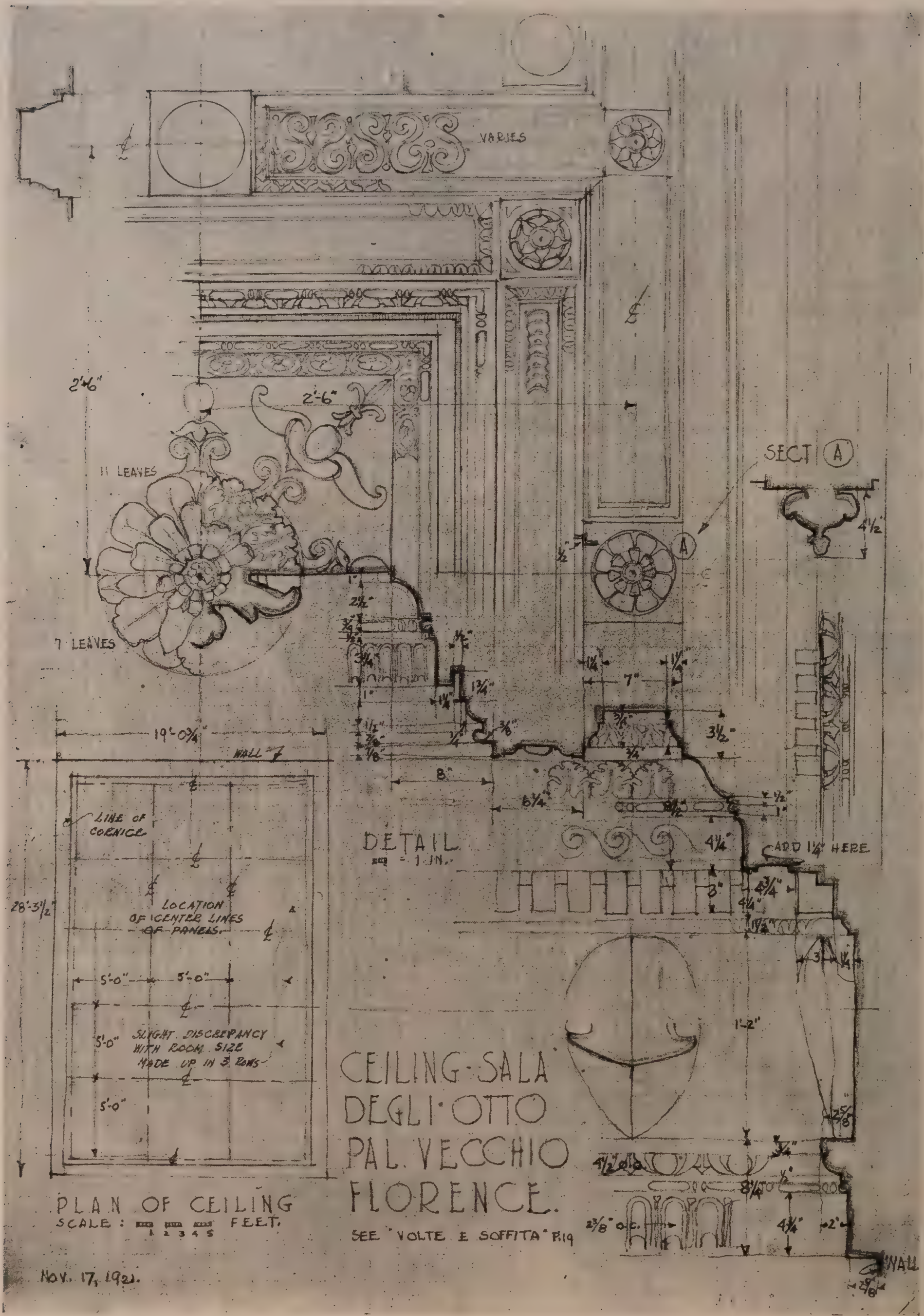




Proposed House for Woodside Circle, Hartford, Conn.
Philip L. Goodwin, Architect.



Proposed House for Woodside Circle, Hartford, Conn. Detail of Front Elevation.
Philip L. Goodwin, Architect.



Ceiling in the Palazzo Vecchio, Florence.
Measured by J. K. Smith and E. A. Grunsfeld, Jr. Drawn by Ernest A. Grunsfeld, Jr.

THE SPECIFICATION DESK

A Department for Specification Writers

MISCELLANEOUS ITEMS OF CONSTRUCTION
PART XVIII.

By Otto Gaertner

In this series of notes Mr. Otto Gaertner, A.I.A., Associate Member American Society of Civil Engineers, is treating of a number of the minor matters of construction that are troublesome unless the architect happens to have met a similar problem previously—matters of a more or less special nature.—Ed.

Garages (*Continued*).

IN WORKING out the details of the lighting equipment, probably the type of reflector to be used plays the most important part in the working out of the remainder of the unit. In consideration of the results to be obtained and the probable desire to eliminate both direct and reflected glare, all parts of the unit must be combined so as to make one efficient unit. In some cases general illumination is simplified. But in such cases as in the machine rooms, stock rooms, and wherever the light is closer to the work there is more liklihood of having glare.

Probably the most general and worst cause of bad lighting is direct glare. Unshaded or insufficiently shaded light sources located within the field of vision, and also too great a contrast between the bright light source and some dark background or adjacent surfaces usually cause glare. In such cases the use of proper reflecting and diffusing reflectors, shades, or globes would be necessary. Reflected glare from the polished surfaces of machine parts or from material parts in fabrication can be eliminated in the same way. Usually some type of metal reflector will be found that is suitable for the particular conditions encountered and by placing a small metal cap over the bottom of the lamp to cover the exposed filament, or by using partly frosted lamps, a good unit can be built up. If necessary, glass reflectors or bowls of the prismatic, mirrored and opal types may be resorted to even if there should be a higher maintenance charge due to breakage.

The more use that can be made of general illumination and the less use that is made of local drop cord illumination probably the greater will be the convenience, efficiency and economy of the installation. There is no doubt that drop cords increase the electrical fire hazard, they wear out rapidly, and the lamps are seldom at the proper locations so that they are continually a source of trouble. The smaller lamps have a less proportional efficiency as compared to the larger ones, there are more lighting units to be maintained and taken care of, and the cords are likely to be dangerous if coming in contact with the work being done in the department in which they occur.

But even the best constructed and laid out lighting system will have its efficiency and economy impaired through the lack of proper upkeep. The units of all lighting systems collect dust, some more and some less, according to their size, shape, whether open or closed, and whether in clean or dirty surroundings. Consequently they must be cleaned frequently or they will lose their efficiency. It is false economy to save money by not cleaning the outfit, thereby necessitating the burning of more current in order to overcome the loss that is absorbed by dirty surfaces, not to mention the loss in the lack of the business of efficiency that may be caused by the lack of proper lighting. In general, where the fixtures are installed in relatively favorable locations, open-reflector units will show a depreciation of ten to twenty-five per cent in four weeks' time. If the locations are poor and the atmosphere is smoky and dust laden, the loss may run as high as forty per cent. Closed reflectors are preferable and can easily be dusted off.

But when they are cleaned it should be done thoroughly. A thorough washing is about one-third more effective than simply wiping them, so that the care with which the cleaning is done is an important item. While the cleaning is being done there are a few other things that should be looked after. In units of indirect lighting where there are several lamps the burnouts are sometimes not apparent except when reaching the fixtures. Such burnouts should be replaced as should any missing lamps, reflectors or other parts. The manufacture of the lamp has improved and progressed so far that the candle power of the lamp is well maintained throughout its life. But if through a faulty lamp or other cause the lamps become blackened or dim they should be replaced and not left to burn out. A blackened lamp absorbs much of the light that is needed on the machines or elsewhere in the room.

Of course empty sockets should be kept filled and any lamps that are of other size than the one required by the lighting unit should be replaced. Also the lamps should be checked for the proper voltage rating and lamps of the same rating as the voltage of the system should be used to insure the best results. Sometimes lights are placed upon power circuits but this is not economical practice. It is better to provide separate meters and wiring for lighting and power which at the same time will insure the use of power current at the minimum power rate which is much lower than the lighting rate which would be charged by the electric service companies.

The cleaning of walls and ceilings, machinery and other furniture or the repainting thereof in order to remove light absorbing dirt and dust has already been mentioned and these together with the above items are the prime causes of inadequate illumination. One usually allows a factor of safety for ordinary depreciation when laying out the system but it is doubly wasteful to allow for the enormous depreciation incurred when the system is not kept up. Glare is somewhat a matter of contrast in brightness and a bright lamp against a dirty reflector, or a bright unit against a soiled and blackened ceiling often appreciably accentuates the glare. Likewise shadows, instead of being light and luminous are often dark and sharp because the diffused light from reflectors is lost when the reflectors are dirty.

It is recommended that the conditions in each room of the building be observed since the same conditions do not occur in the storage room as in the service station or repair shop, the machine room, paint room, etc. For each case a maintenance schedule should be established and cleaning and replacements properly taken care of. Or perhaps an average may be taken to cover the entire building, depending upon its size and working arrangement. If the building is large enough it may warrant the use of a foot-candle meter as a check for this work and readings of illumination intensity may be taken at regular intervals at designated places in the various spaces. As much attention should be paid to this as to tax rates, insurance rates and similar items.

The architect is often asked about the difference which some type of construction or some item of equipment would make in the insurance rate upon a garage building or upon a dwelling having a garage attached to it or built as part of it. He should have some idea whether or not it would be economy to include certain features in order to get a cheaper rate. There may be only a very small difference in the rate, and the cost of the additional features may be too great to make it economical in the end and furthermore the additional features may increase the maintenance cost or the interest on the investment.

Sometimes the architect is consulted before the property on which the proposed garage building is to be erected is bought. Often there is a choice of several parcels. In a city it does not make so much difference where the property is located as far as the fire hazard is concerned but in the suburbs the property should be chosen so as to come within areas of public fire protection. In other words, the property should be within five hundred feet from a public hydrant on a public street and also within one and one-half miles from a fire department station, measured on public streets or roads. If the fire department apparatus is of the automobile type and the roads are good the distance may be increased so that the building will come within two miles of the fire department station in order to be rated as being protected and to be able to take advantage of lower rates.

(*To Be Continued.*)

PUBLICATIONS OF INTEREST TO THE SPECIFICATION WRITER.

Any publication mentioned under this heading will be sent free, unless otherwise noted, upon rqeuest, to readers of Pencil Points *by the firm issuing the publication. When writing for any of these items please mention* Pencil Points.

Ars Ecclesiastica.—Handsomely illustrated brochure in sepia showing examples of wood carving and sculpture. Many designs by leading architects. 48 pp. 8½ x 11. The American Seating Co., 1091 Lytton Bldg., Chicago, Ill.

Equipment and Supplies for Architects, Engineers and Draftsmen.—Complete illustrated catalog showing full line of everything required in the drafting room. 130 pp. 6 x 9. Electro Sun Co., 161 Washington St., New York City.

Published by the same firm, Drafting Room Furniture. Illustrated catalog showing wood and metal furniture, drawing tables and other specialties required in the modern drafting room. 40 *pp.* 6 x 9.

Beauty Plus Service in Floors.—Booklet dealing with flooring problems for homes, hotels, apartment houses, office buildings, banks, schools, churches and factories. 6 x 9. 16 pp. Southern Pine Assn., Dept. 130. New Orleans, La.

Automatic Gas Water Heaters.—Catalog and hand book covering the subject. Roughing-in dimensions, layouts, tables, specifications, etc. 120 pp. 8½ x 11. Pittsburgh Water Heater Co., Post office Box 1109, Pittsburgh, Pa.

Modern Lighting Data.—Loose-leaf portfolio containing complete information on the subject, covering all types of lighting problems. 200 pp. 8½ x 11. National X-Ray Reflector Co., 235 West Jackson Blvd., Chicago, Ill.

Mueller Brass Goods.—Complete catalog "E" on plumbing specialties for the modern building. Profusely illustrated. 8½ x 11. 460 pp. Mueller Company, Inc., Decatur, Ill.

Published by the same firm, Mueller Automatic System of Hot Water Heating, Control and Dependable Plumbing and How to Secure It.

Hardware Catalog.—Volume 14. Handsome and completely illustrated catalog of ornamental and standard hardware. Thumb indexed. Flexible binding. 360 pp. 8 x 11. Russell & Erwin Mfg. Co., New Britain, Conn.

Published by the same firm, Russwin Hardware, brochure of period designs with descriptive text. 72 *pp.* 6 x 8.

Building with Assurance, 2nd Edition.—Handsome book with many full page color plates on subject of woodwork for residences. Every room in the house is separately considered and standard moldings, columns, blinds and shutters, doors and window sash, set forth. 440 pp. Flexible binding. 8½ x 11. Morgan Co., Oshkosh, Wis.

Refrigeration.—Booklet describing modern refrigerating equipment, suitable for hotels, club houses, hospitals, department stores, etc. 50 pp. 8 x 10. Kroschell Bros., 442 W. Erie St., Chicago, Ill.

Electric Traction Elevators.—Bulletin No. 500. Describes this type of modern elevator equipment. 8½ x 11. 32 pp. Kaestner & Hecht Co., 1100 Blackhawk St., Chicago, Ill.

National Pipe in Large Buildings.—Bulletin No. 25-B covers subject of anti-corrosion engineering, gas piping in buildings, standard specifications, diagrams, etc. 8½ x 11. 74 pp. National Tubing Co., Frick Bldg., Pittsburgh, Pa.

Oak Flooring.—Attractive brochure showing patterns and containing many decorative sketches. 16 pp. 9 x 12. E. L. Bruce Co., Memphis, Tenn.

Asbestos Shingles.—Catalog S. Contains color plates and typical installations. 60 pp. 6 x 9. Asbestos Shingle Slate & Sheathing Co., Ambler, Pa.

Published by the same firm, Asbestos Corrugated Roofing, Engineering Data Sheet useful to architects, draftsmen and specifition writers. 40 *pp.* 8½ x 11.

Evans Vanishing Door.—Catalog "H" covers subject of modern wardrobes with diagrams, plans, details and specification data. 8½ x 11. 24 pp. W. L. Evans, Washington, Indiana.

Byers Pipe.—Loose-leaf portfolio containing collection of bulletins covering complete technical data on the subject. 150 pp. 8½ x 11. A. M. Byers Co., 235 Water St., Pittsburgh, Pa.

Refrigerating Data.—Catalog 14. Loose-leaf portfolio describing ice making plants, refrigerators and specialties having to do with refrigeration. 100 pp. 8 x 10½. The Brecht Co., 12th St. & Cass Ave., St. Louis, Mo.

Distinctive Floors.—Folder illustrated with ten color plates showing patterns of Tread Lite tile for various uses. A. I. A. filing index 23-D. Bonded Floors, Inc., 1421 Chestnut St., Philadelphia, Pa.

Cement Roofing Tile.—Booklet on the subject of flat slab roof construction. Nine full page construction details and other valuable data. 8½ x 11. The George Rackle & Sons Co., Cleveland, Ohio.

Published by the same firm, Gothic Windows. Attractive brochure with construction drawings and many photographs of drawings of windows of various types.

Appalachian Oak Flooring.—Portfolio covering complete information on this material. 8½ x 11. W. M. Ritter Lumber Co., Columbus, Ohio.

Panel Boards, etc.—Bulletins 1-A and 3 devoted to panel boards, cabinets and switchboard accessories, with much valuable data for the specification writer. 40 pp. 8 x 11. The Trumbull Electric Mfg. Co., Plainville, Conn.

Published by the same firm, Safety Switches, Bulletin No. 5. 60 *pp.* 8½ x 11.

Illinois Heating Systems.—Vapor Details No. 21 covering subject of heating apartments, schools, hotels, hospitals and residences. 32 pp. 8½ x 11. Illinois Engineering Co., N. W. Cor. 21st and Racine Ave., Chicago, Ill.

Published by the same firm, Bulletin No. 11. *Looseleaf, dealing with Eclipse line of steam heating specialties.* 50 *pp.* 6½ x 9½.

National Steel Fabric.—Illustrated book for the information of architects, draftsmen and builders. Covers various types of stucco work with working drawings and much useful information. 32 pp. 8½ x 11. National Steel Fabric Co., Union Arcade, Pittsburgh, Pa.

"Korelock" Door Designs.—Handsome illustrated portfolio with color plates showing complete line of veneered doors for all uses. 148 pp. 8½ x 11. Paine Lumber Co., Ltd., Oshkosh, Wis.

Published by the same firm, Miracle Doors, portfolio of color plates showing this line completely. 60 *pp.* 8½ x 11. *Woodwork Specialties, covering built-in furniture, bookcases, medicine cabinets, etc. Garage Door Designs, booklet covering this subject. Double and Triple Doors.*

Pyrobar Roof Tile for Industrial Buildings.—Bulletin with blue prints and complete engineering data on subject indicated. 30 pp. 8½ x 11. U. S. Gypsum Co., Dept. K., 205 West Monroe St., Chicago, Ill.

Jamison Doors.—Catalog No. 11 covers subject of doors for all types of cold storage conditions. Complete working drawings and blue prints, also specifications. 80 pp. 8½ x 11. Jamison Cold Storage Door Co., Hagerstown, Md.

Peerless Built-In Furniture.—Portfolio of 10 detail sheets on kitchen cabinets, table cabinets, linen closets, bathroom cabinets, etc. 8½ x 10½. Built-In Fixture Co., 2608 San Pablo Ave., Berkeley, Cal.

Seeger Refrigerators.—Catalog No. 39 showing line of syphon refrigerators for residences, full details, construction specifications, etc. 40 pp. Seeger Refrigerator Co., St. Paul, Minn.

Architectural Finishes.—Shows Bay State line of wall finishes, brick and cement coatings, brick and cement floor coatings, and many other preparations for special uses. Color samples and specifications, 32 pp. 8½ x 11. Wadsworth, Howland & Co., Inc., 141 Federal St., Boston, Mass.

Published by the same firm, Bay State Waterproofing. 16 *pp. booklet on the subject.*

Wood Block Floors.—Illustrated booklet on the subject of wood block for floors for factory use and wherever heavy duty is required. 24 pp. 8 x 11. Jennison-Wright Co., Cleveland, Ohio.

Details and Specifications.—Covers complete line of Venetian blinds for all uses. Sectional drawings, service sheets and complete data. 8½ x 11. Western Blind & Screen Co., 2700 Long Beach Ave., Los Angeles, Cal.

Interiors Beautiful.—Booklet showing many uses of Upson board. Suggestions for many types of buildings. 8 x 11. 20 pp. The Upson Co., Lockport, N. Y.

Published by the same firm, The Snow White Lining. Booklet describing Upson Fibre Tiles for bathrooms, nurseries, kitchens and many other uses. Uniform with the above.

Telesco Partitions.—Illustrated booklet showing unit partitions with construction details and complete data. 16 pp. 8½ x 11. Improved Office Partition Co., Elmhurst, N. Y.

Health Bulletin on Sewage Disposal, by Charles M. Mayo.—Treatise on the subject with layouts, diagrams and much useful information. 24 pp. 9 x 12. United Cement Products Co., Indianapolis, Ind.

Ice Making and Refrigerating Machinery.—Bulletin No. 69 describing vertical, single acting enclosed ice making and refrigerating machine. Diagrams with complete data. 32 pp. 8½ x 11. York Mfg. Co., York, Pa.

Airolite Specifications.—Folder containing specifications for adjustable metal ventilators for windows, transoms and door panels. Standard filing size. The Window Wall Co., Marietta, Ohio.

Sectional Office Partitions.—Booklet with layouts, diagrams, sample floor plans and complete data on the subject. 32 pp. 8½ x 11. Circle A. Products Corp., Champaign, Ill.

Store Front Details.—Set of 15 full size drawings showing different types of store front construction. 16 x 26. Zouri Drawn Metals Co., Chicago Heights, Ill.

Thatcher Furnaces.—New catalog with color plates showing complete Thatcher line. Sections, layouts and specification data. 24 pp. 8½ x 11. Thatcher Furnace Co., 30 St. Francis St., Newark, N. J.

Published by the same firm, Thatcher Ranges. Uniform in style with above, covering full line of ranges for residence, club, restaurant and other uses.

Diamond D Lath.—Booklet fully illustrated showing uses of metal lath in partition and other work in various types of buildings. Diagrams, specifications, etc. 50 pp. 6 x 9. Penn Metal Co., 65 Franklin St., Boston, Mass.

Drinking Fountains.—Booklet illustrating and describing various types suitable for all uses. 16 pp. 8 x 10. D. A. Ebinger Sanitary Mfg. Co., Columbus, Ohio.

Published by the same firm, Steel Compartments, similar to the above, containing drawings, layouts and descriptive matter on steel compartments for a variety of uses.

PENCIL POINTS

VOLUME V JULY 1924 NUMBER 7

SUMMER TIME

SUMMER TIME is sketching time, and there will be prizes for the best sketches entered in the Pencil Points Sketch Competition for 1924. Vacation time, Saturday afternoons and Sundays during the summer afford an opportunity to derive much pleasure from sketching and perhaps win a prize with the recognition it brings. In any case sketching improves one's ability to draw and sketching architectural subjects is an excellent way of acquiring a more thorough knowledge of architecture, a lifelong study that grows more interesting as one advances.

The plan of the sketch competition to be conducted by this magazine this year is similar to that of the sketch competitions we have conducted in previous years.

Sketches to be considered in this competition must be received at the office of Pencil Points, 19 East 24th Street, New York City before noon, October 20, 1924. They may be sent in any time between now and then. Entry in this competition is entirely free and it is open to everyone everywhere excepting architects maintaining their own offices and men who derive their principal income from making renderings on other than a salary basis, i. e., professional renderers.

The purpose of this competition is to stimulate interest in sketching, particularly on the part of draftsmen and students. A competitor may submit not more than three sketches. The work must be entirely free-hand and sketched from the objects, not imaginary subjects or proposed buildings or treatments. The subjects must be architectural in the sense that architecture must predominate. The sketches may show the exterior of a building or buildings, with or without a landscape setting, interiors with or without furnishings, or exterior or interior architectural detail alone. The sketches may be in any medium,—pencil, pen-and-ink, charcoal, water color, etc., or in any combination of mediums and on any kind of paper. The size of sheet must not exceed 18 in. x 22 in., but it may be of any size smaller, pages from pocket sketch books for instance. All sketches submitted must have been made during the year 1924. The complete program, all the conditions, can be found in the announcement of the competition on page 122 of the May issue of Pencil Points. A copy of the program may be obtained free upon application to the office of Pencil Points.

Whether or not one is eligible for entry in this Sketch Competition it is worth while to sketch during the coming months of summer and autumn, for the pleasure and the benefit of the training. There is hardly anything of greater value to an architect than the ability to express himself freely in sketch studies of his designs. Sketching buildings is an excellent way of obtaining this ability.

In the issues of this magazine we have published from time to time a number of articles and innumerable sketches which it will prove worth while to look up at this time.

In Pencil Points for January1922 will be found a complete report of the judgment of the Sketch Competition for 1921, fully illustrated. In the issue for December 1922, will be found the report of the Sketch Competition for 1922. In Pencil Points for February 1924 will be found an article by Kenneth Conant, winner of the Sketch Competition for 1921, on "Drawing in Pencil." In the issue for June 1924 is an interesting illustrated article by Francis S. Swales on "Architectural Watercolors," with illustrations of sketches by Mr. Cass Gilbert and Mr. Bruce Rabenold. In Pencil Points for March 1923 is an article, "Sketching in and About the City," by Otto Langmann. Scattered through the issues of Pencil Points from the very first issue will be found interesting reproductions of sketches in pencil, pen-and-ink, and water color, from which much can be learned. The last two issues are especially rich in this kind of material for the May issue contains reproductions of many sketches by Henry Bacon, while the June issue shows a number of drawings in pen-and-ink by Bertram G. Goodhue.

Reading or re-reading the articles mentioned above will prove a great help to anyone who intends to make use of part of his time this summer in sketching. There is a revival of interest in sketching; some of the men of a generation or more ago made admirable sketches, then came a time when few good sketches were produced and today a recognition of the value of sketching and of the pleasure to be derived from it is developing a new and constantly growing body of men who sketch well.

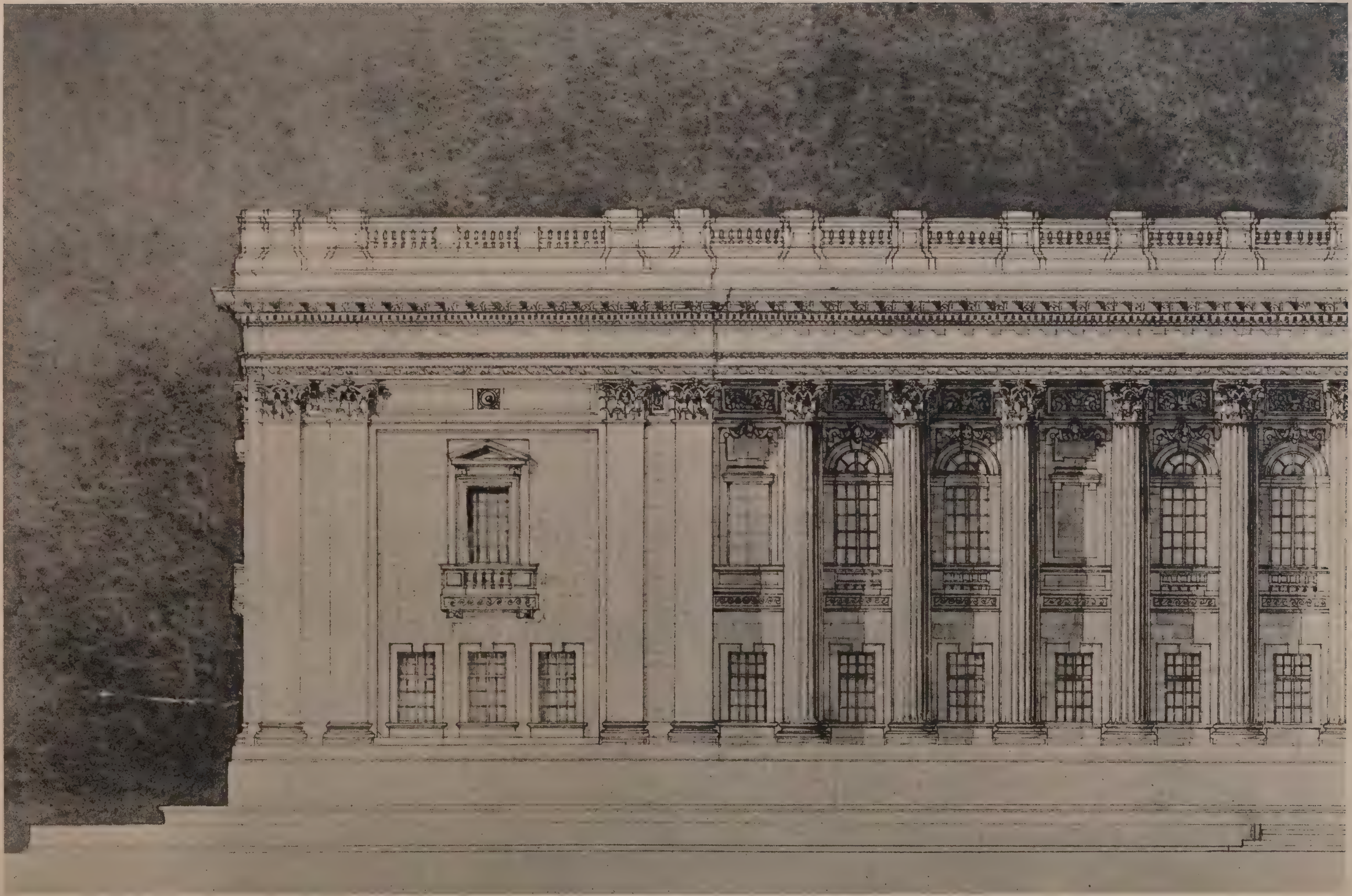


Figure 5. Design by Albert Kelsey. Competition for Department of State Building, Washington, D. C. Portion of the Elevation at Original Scale, Drawn by Grant M. Simon.

DRAWING IN THE CLASS A PROJET AND IN COMPETITIONS

BY JOHN F. HARBESON

In this article Mr. Harbeson continues the discussion of the study of architectural design with special reference to the program of the Beaux-Arts Institute of Design. The articles of this series are intended to assist students in the ateliers and schools where the B. A. I. D. program is followed.—ED.

WHEN a man has won his way to Class A by making his points in the Analytique and Class B projets, he has gained quite a little experience; he may have become a fairly able and clever draftsman, for the more a man draws the better his drawing will be; that is, if he thinks while he draws, and the drawing is not just a perfunctory mechanical process. Sometimes this progress in the ability to express one's thoughts has been more rapid than the ability to think clearly what should be expressed, and a student begins to have a very good opinion of himself as a *designer* because he knows himself to be a clever draftsman, an able draftsman, able to draw, able to *indicate*.

So it is well to consider just what good draftsmanship is really worth. As we have said before, draftsmanship—presentation—alone will not win an award. Perhaps this is true of an archaeology or a measured drawing, for in these there is no "parti" to choose, and one who can "compose" a sheet made up of small scale drawings and large scale details, and can draw and render this composition well, will win his medal; the only other necessary qualification being an *intelligent* use of the *right* documents and some imagination in their use. In any other case the first essential is the solution of the problem—a good "parti."

But there are times when good draftsmanship has a distinct value. The late Frank Miles Day, who had served as a juror in many architectural competitions, once said that there was one thing a very good—a careful—drawing did do in a competition: it ensured the very careful consideration by the jury of the scheme expressed so carefully. It is in competitions, in fact, that careful drawing repays all the effort expended on it, especially in student competitions and competitions for travelling scholarships.

Where two competitors have hit upon the same parti, and it sometimes happens that there is only one satisfactory solution to a problem, it is easily seen that the way in which this solution is drawn and rendered takes on a new importance. In such cases the result frequently is that the award is made to that competitor who has finished all his drawings—plan, elevation and section equally well—such a

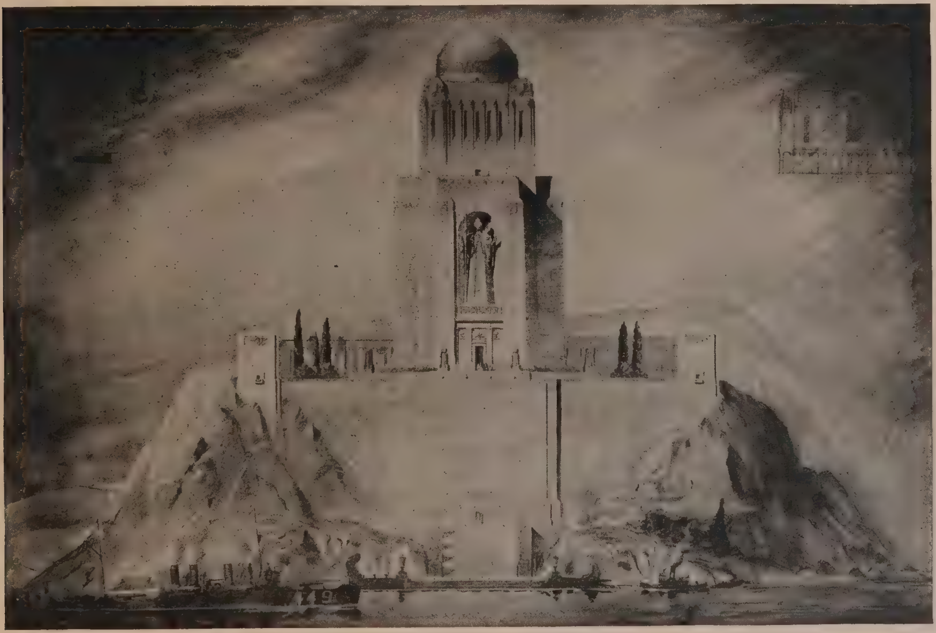


Figure 8. Design by Clayton Evans Jenkins for "A Naval Pantheon," Class A Projet.

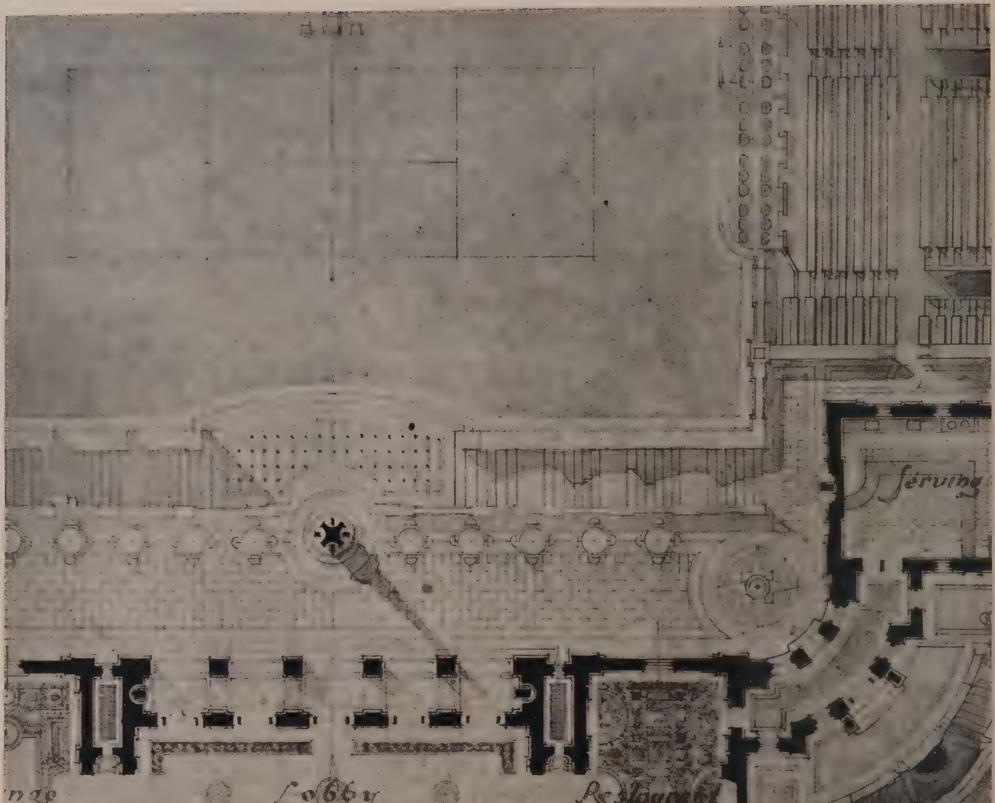


Figure 1. Design by Roy A. Larson for a Tennis Club. Portion of Plan.

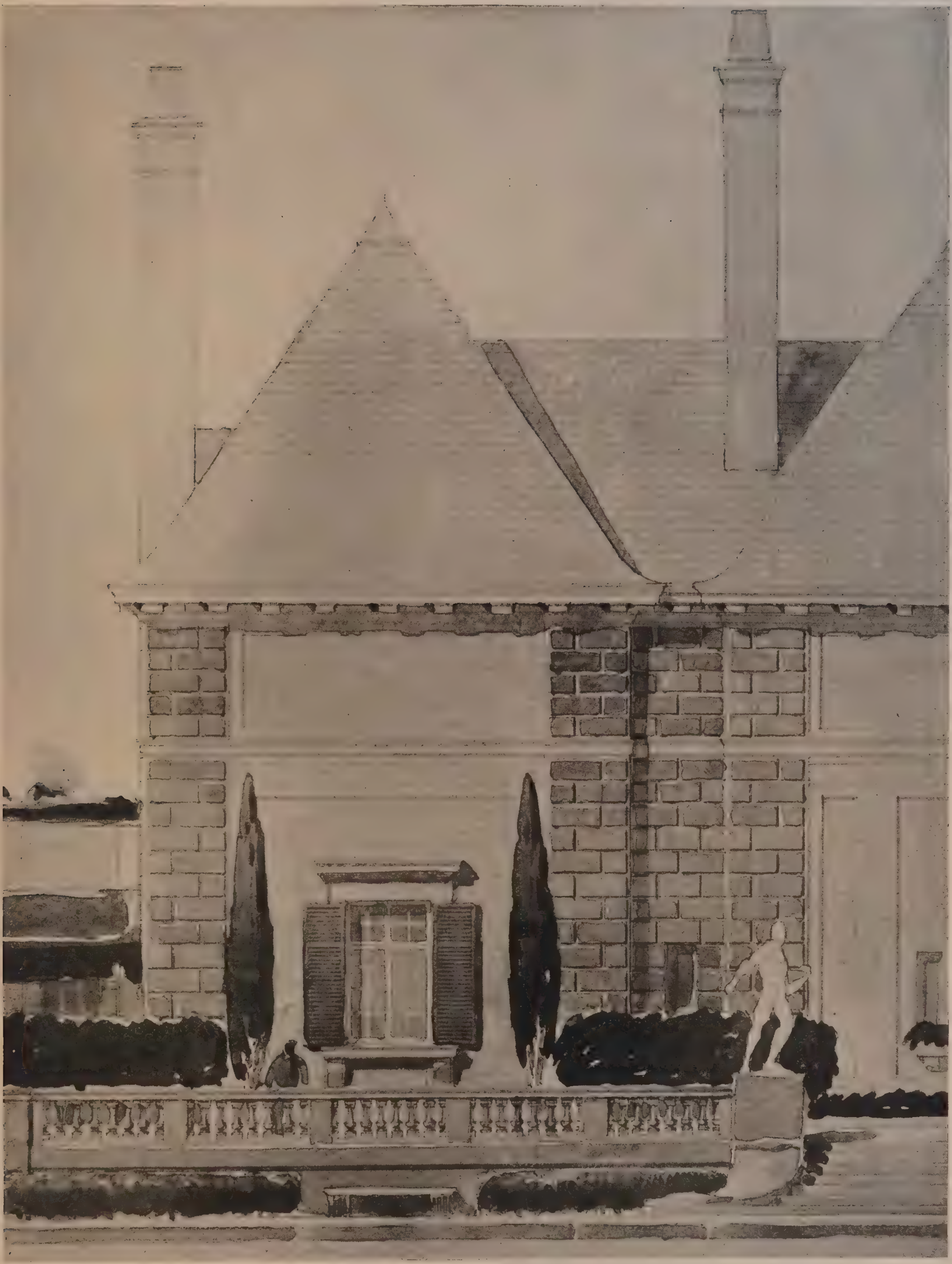


Figure 2. Design by Roy A. Larson for a Tennis Club. Portion of the Elevation Reproduced at the Actual Size of the Original Drawing.

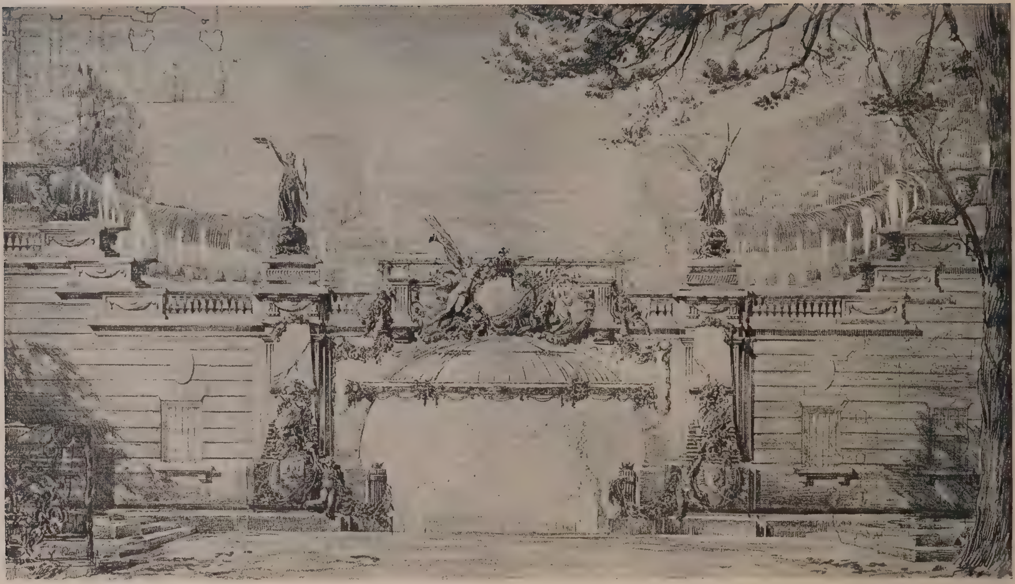


Figure 6. Design by M. D'Amato, Pupil of M. Laloux, for "La Sortie d'un Chemin de Fer Métropolitan."

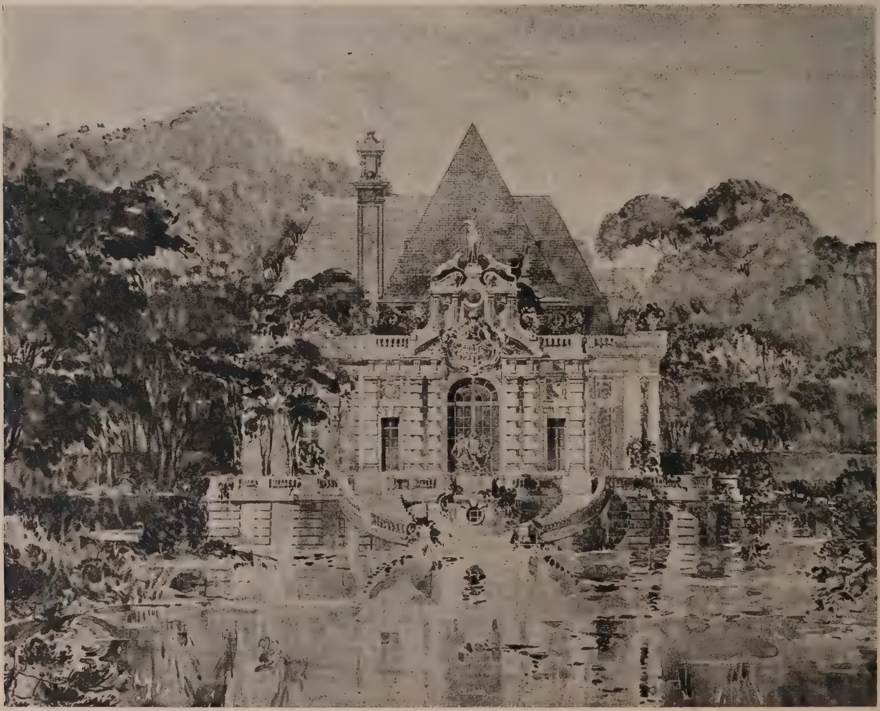


Figure 7. Design by Hafner, Pupil of M. Laloux, for "Un Rendez-Vous de Chasse."

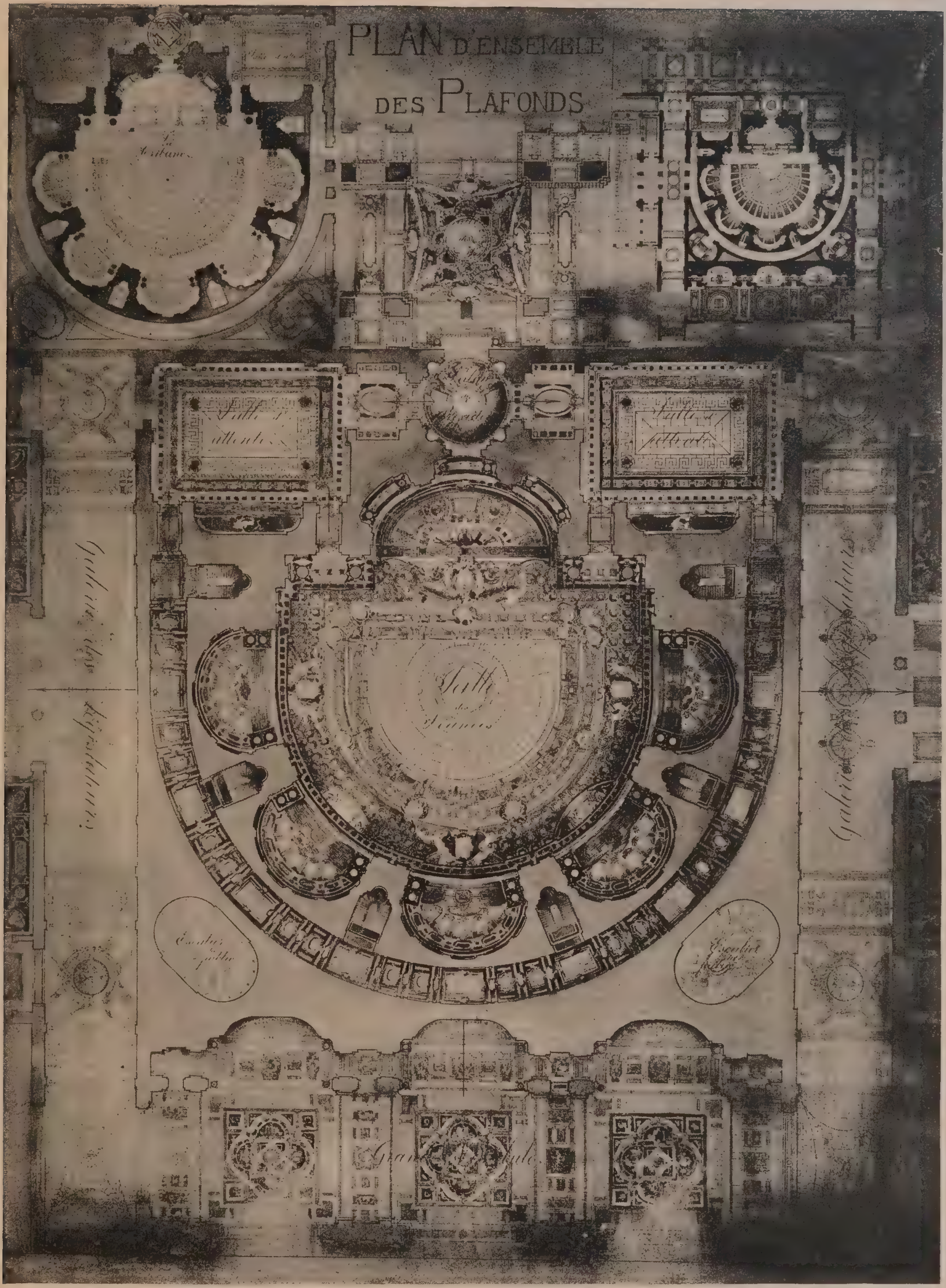


Figure 4. Design by M. Castel, Pupil of M. Bernier, for "La Salle d'un Palais Législatif."

presentation winning over the work of students who may be more clever, who may have presented the elevation, usually the show drawing, much better than the winner, but have left the other drawings, particularly the section, in a very sketchy form, giving evidence of haste. Juries awarding a travelling scholarship often seem to hold the opinion that a man who carries all his drawings forward equally and presents them all with the same completeness, will show the same efficiency in disposing of his time while travelling, and that the student who has shown greater cleverness in one drawing, leaving undeniable earmarks of haste on the others, would not dispose of his time and money as well. This has happened so frequently in such judgments that it seems to be part of the psychology of judging—it seems to illustrate an invariable tendency.

This is markedly true of such a prize competition as that for the Emerson Prize, where usually the parti called for is very simple. As both documents and criticisms are allowed for this problem, it can easily be seen how much importance the jury *must* place on drawing and rendering.

So it can easily be seen that a man competing for a foreign scholarship, a thing that will give a new meaning to his whole life if he wins, will be tempted to send in the best possible drawing hoping that should the judgment narrow itself to considering his drawings and that of one other, and *parti and other things being equal,* the excellence of the drawing and rendering, of the "technique" in short, will pull the balance in his favor.

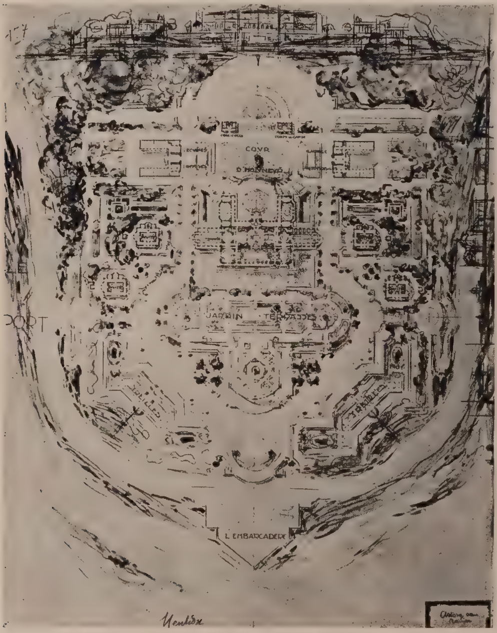


Figure 3. Design by Albert Astorg, Pupil of M. Bernier, for "Une Residence Pour un Chef D'Etat."

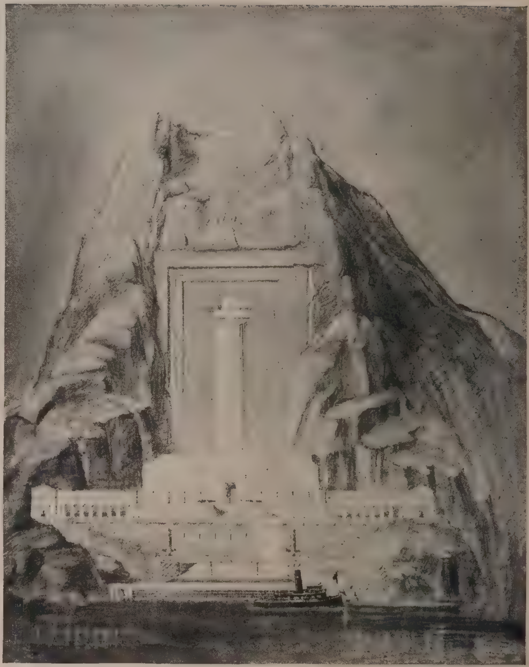


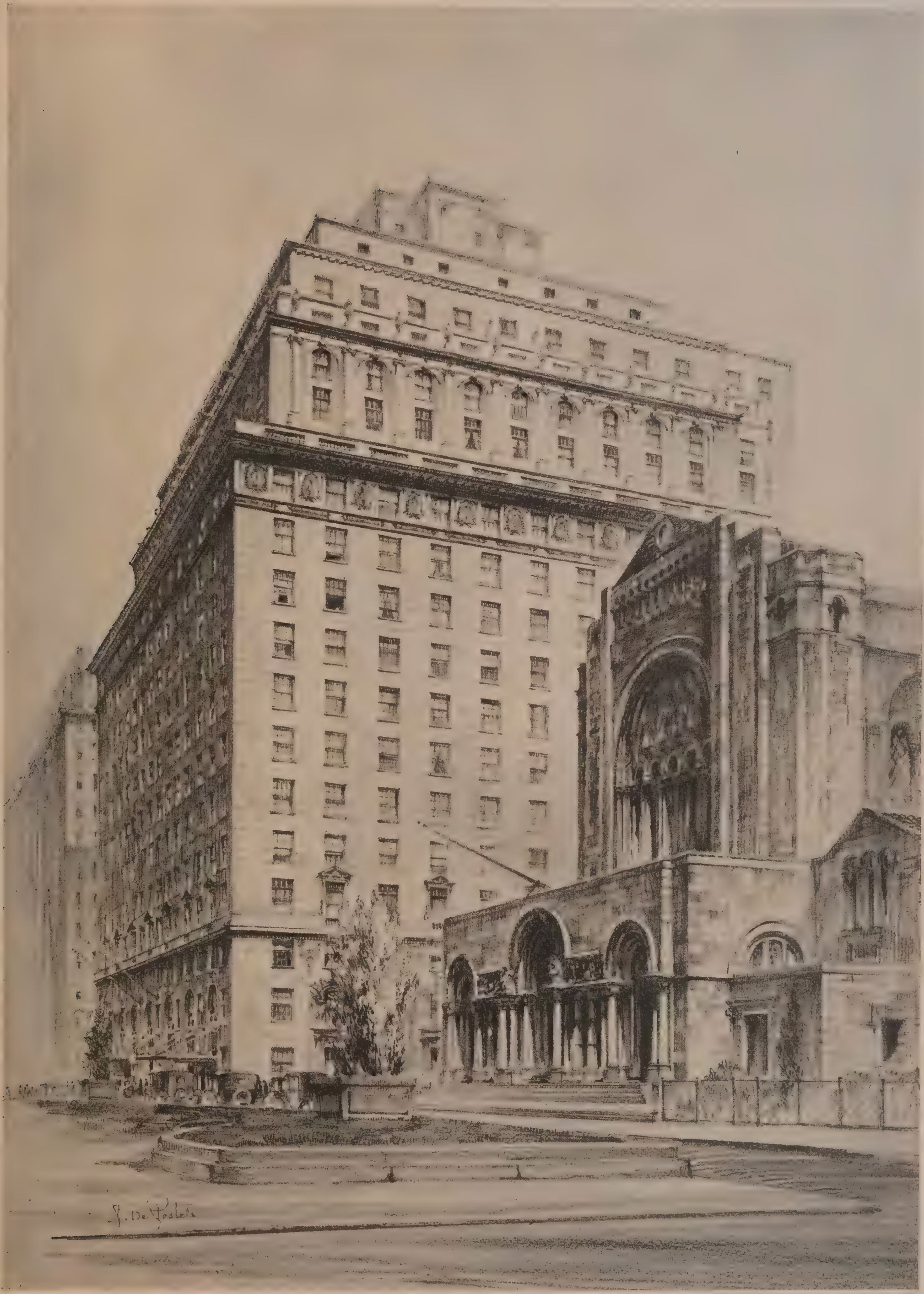
Figure 9. Design by Irwin Calvan for "A Naval Pantheon," Class A Projet.

In cases where only one parti is possible, the design of the *parts* of a composition at once gains in importance: the study of small parts of an architectural design frequently depends on good draftsmanship. The flattening of the projections of pilasters to gain refinement; the study of profiles, the appropriateness of ornament, and the design of the silhouette of free ornament such as figure sculpture in the round, all depend on the ability to make drawing express slight differences in the quality of form.

Figures 1 and 2 are small portions of Class A drawings—plan and elevation. They are reproduced at the actual size of the original; they do not seem overly careful; yet the general effect of these drawings when seen in their entirety was that they were painstakingly neat and carefully rendered. Of course, what constitutes "good" drawing depends somewhat on the problem. A seventy-two hour sketch problem (Figure 3) will be called good drawing with a very different standard from that used to judge a finished projet (Figure 4). And this, in turn, seems careless indeed when compared to such drawings as are submitted in many of our American competitions—professional competitions (Figure 5)—which are frequently drawn with incredible care and skill.

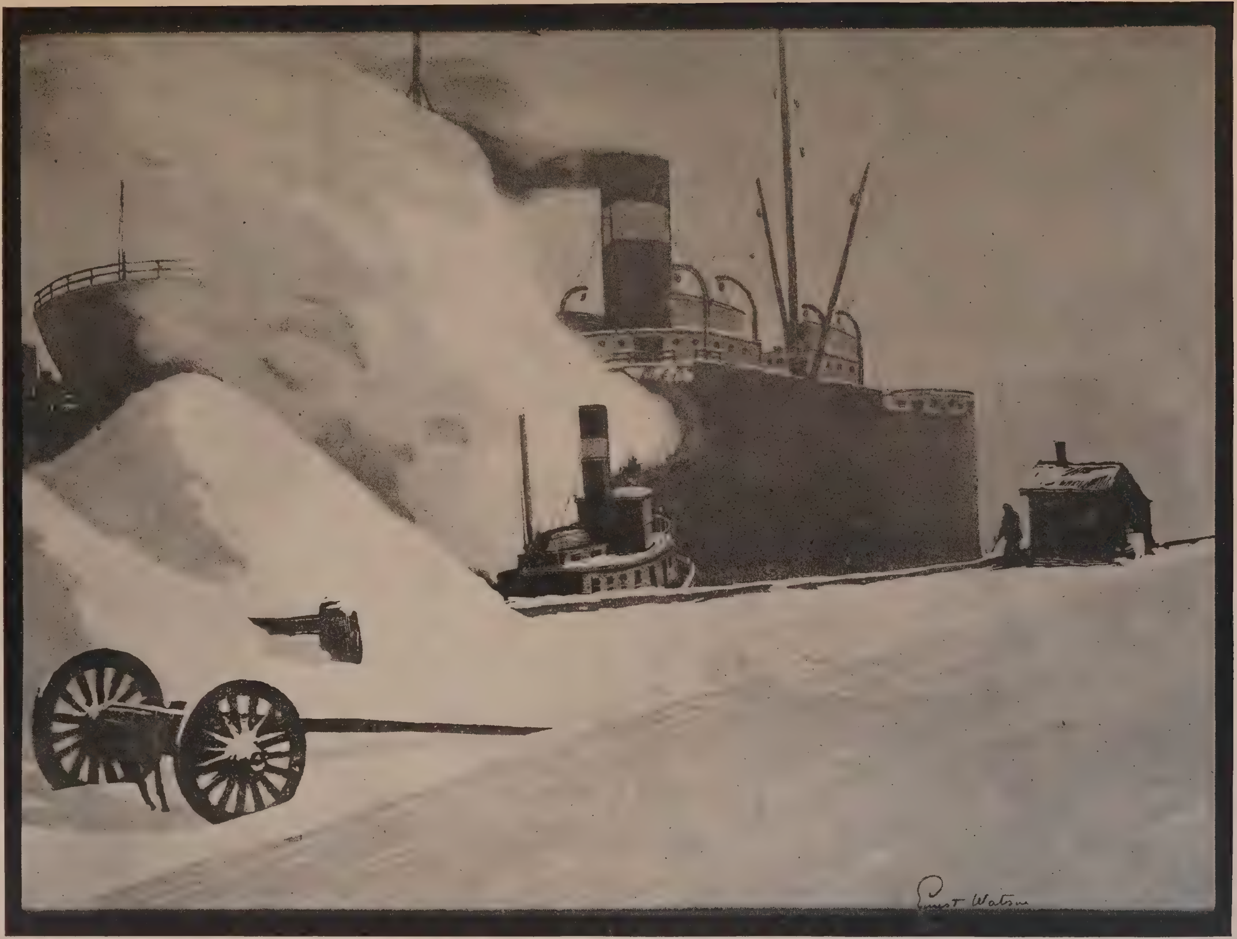
What is important is that the designer shall be able to express with conviction anything that his imagination can conceive. This requires a great

(*Continued on Page 64*)



RENDERING BY T. DE POSTELS. ST. BARTHOLOMEW'S CHURCH AND THE HOTEL AMBASSADOR, NEW YORK CITY.

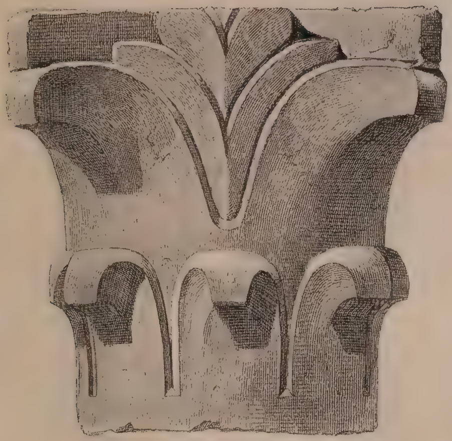
On the other side of this sheet is reproduced an especially interesting pencil rendering by Theodore de Postels. It shows a very skillful handling of a modern tall building in such a way that while it looks new and trim there is no sense of mechanical hardness, the details are fully indicated here but without loss of pictorial effect and the contrast between the hotel and the church is well handled. The indication of detail in both buildings reveals a remarkable ability to suggest the character of such detail in a satisfying way.



LINOLEUM BLOCK COLOR PRINT BY ERNEST WATSON, "SMOKE, STEAM AND SNOW."

The picture on the other side of this sheet is a reproduction in monochrome of one of the many linoleum block prints in which Ernest Watson has produced effects of great tenderness and beauty in innumerable delicate gradations of color. This print is notable for the success with which the spirit, the character, of the subject has been perceived and rendered and for the excellence of the pictorial composition. In making these prints Mr. Watson uses blocks on which the design is cut in linoleum, but he does not stop with the usual single printing from each block. By manipulating the inks on the blocks and by repeated printings he produces pictures of remarkable beauty and of a character not to be obtained in any other way.

75



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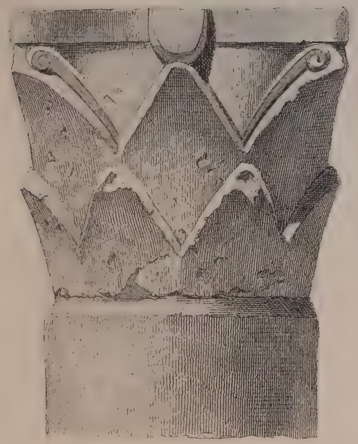

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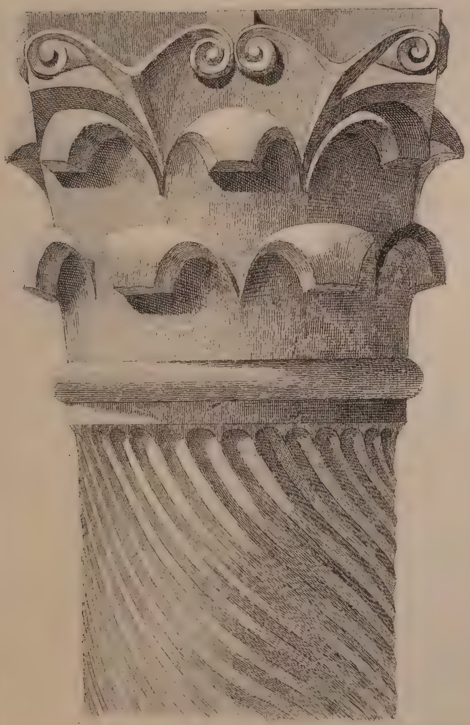

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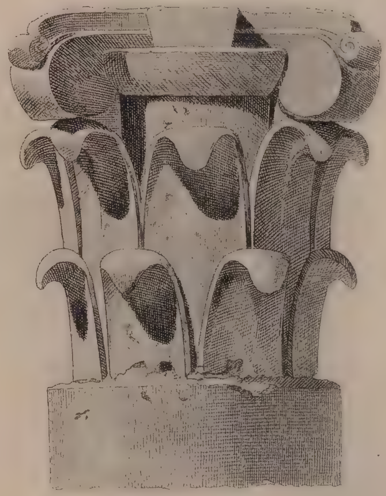
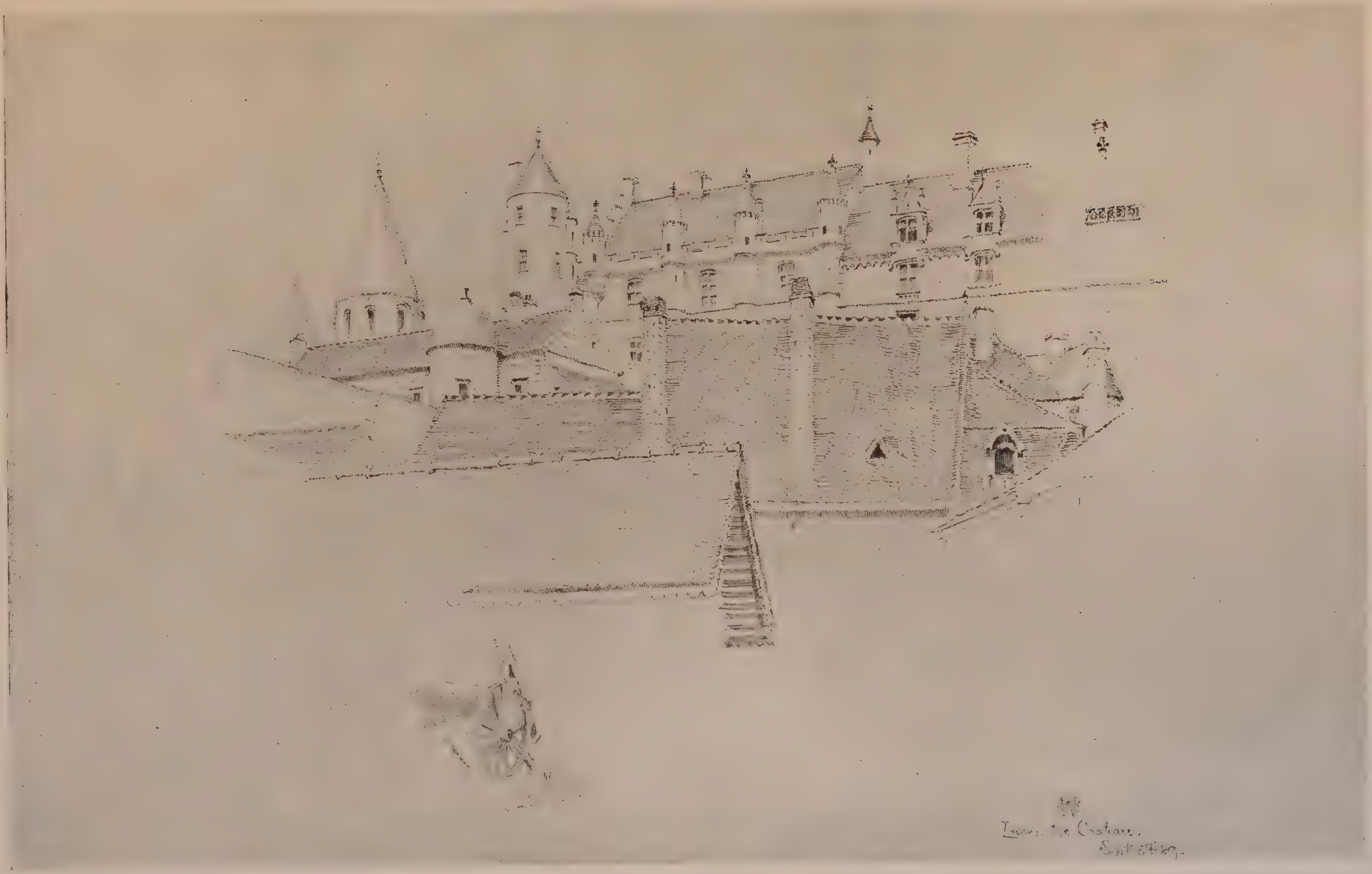


CAPITALS IN THE CATHEDRAL AT CORDOVA
FROM "SPANISH MASTERPIECES OF ARCHITECTURE"

The capitals shown on the other side of this sheet are from a book of Spanish architectural works now being printed by the publishers of Pencil Points *under the title "Spanish Masterpieces of Architecture." This work will be Volume* 4 *in the "Library of Architectural Documents," and the material is from the great collection made by the Spanish Government. This volume is devoted to Romanesque and Byzantine architecture in Spain. A succeeding volume will treat of the other styles as exemplified in Spanish architectural monuments.*


Loches. the Chateau.
Sept 5th 89.

SKETCH BY WALTER B. CHAMBERS. LOCHES—THE CHATEAU.

The very fine sketch reproduced on the other side of this page is one of the many made by Walter B. Chambers in 1889 *when he and the late Henry Bacon were on a sketching tour in Europe. It shows masterly technique, the grasping and putting down in the most direct and sure manner the character of an interesting architectural subject. It is well worthy of study.*

MASTER DRAFTSMEN, III

HARVEY ELLIS

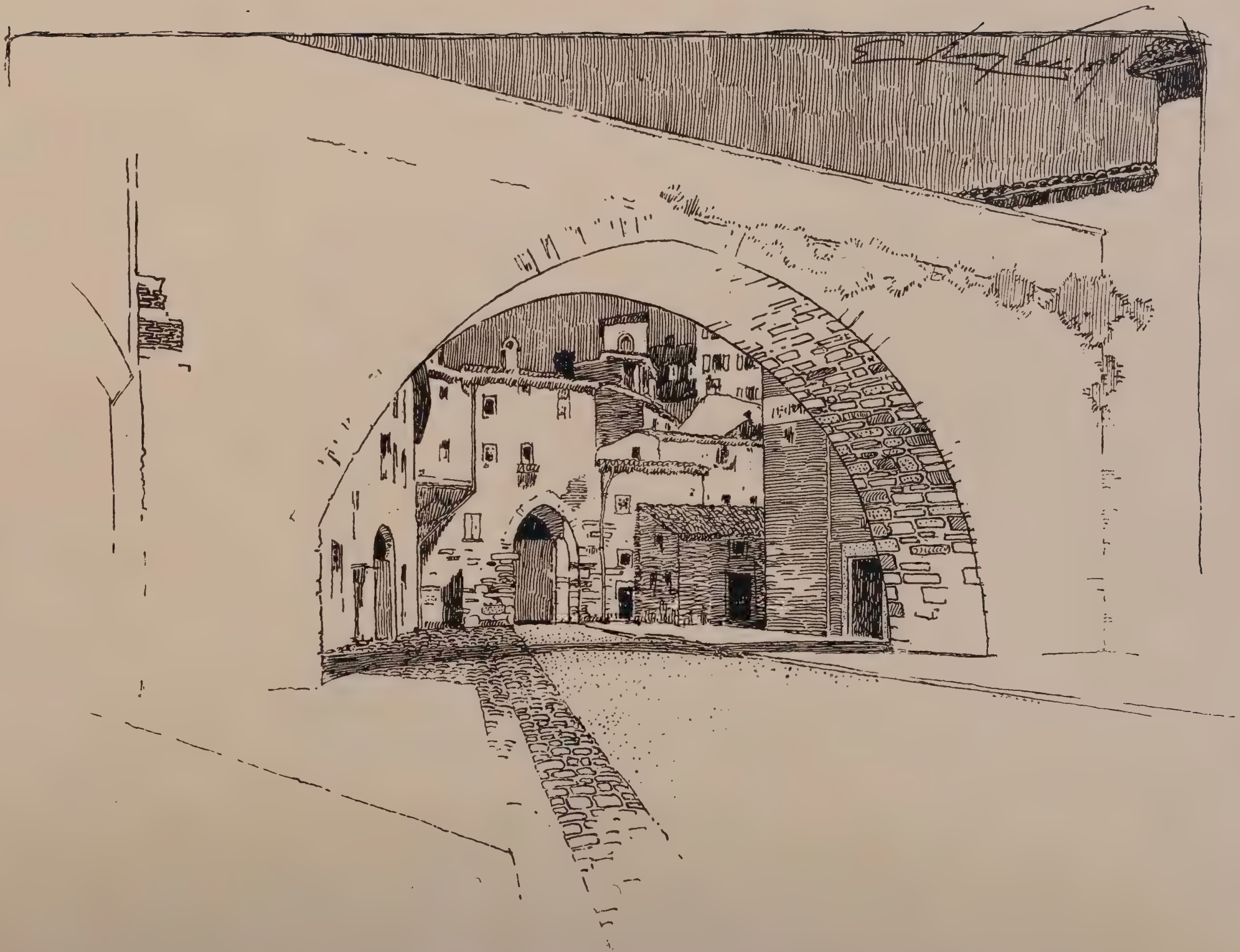
1852-1907

ARCHITECTURAL artist par excellence in pen and ink, charcoal and water color; designer of architecture in a very original and individual style; man of broad intellect and deep learning; philosopher, painter of charming decorative pictures; designer of the most delightful stained glass windows and of book covers and posters, Harvey Ellis was a man of many talents. He was interested in everything possessing beauty from a moth to a mountain—from a key handle to a cathedral, and in every turn of the human mind from the latest local witticism to the most remote oriental poetry.

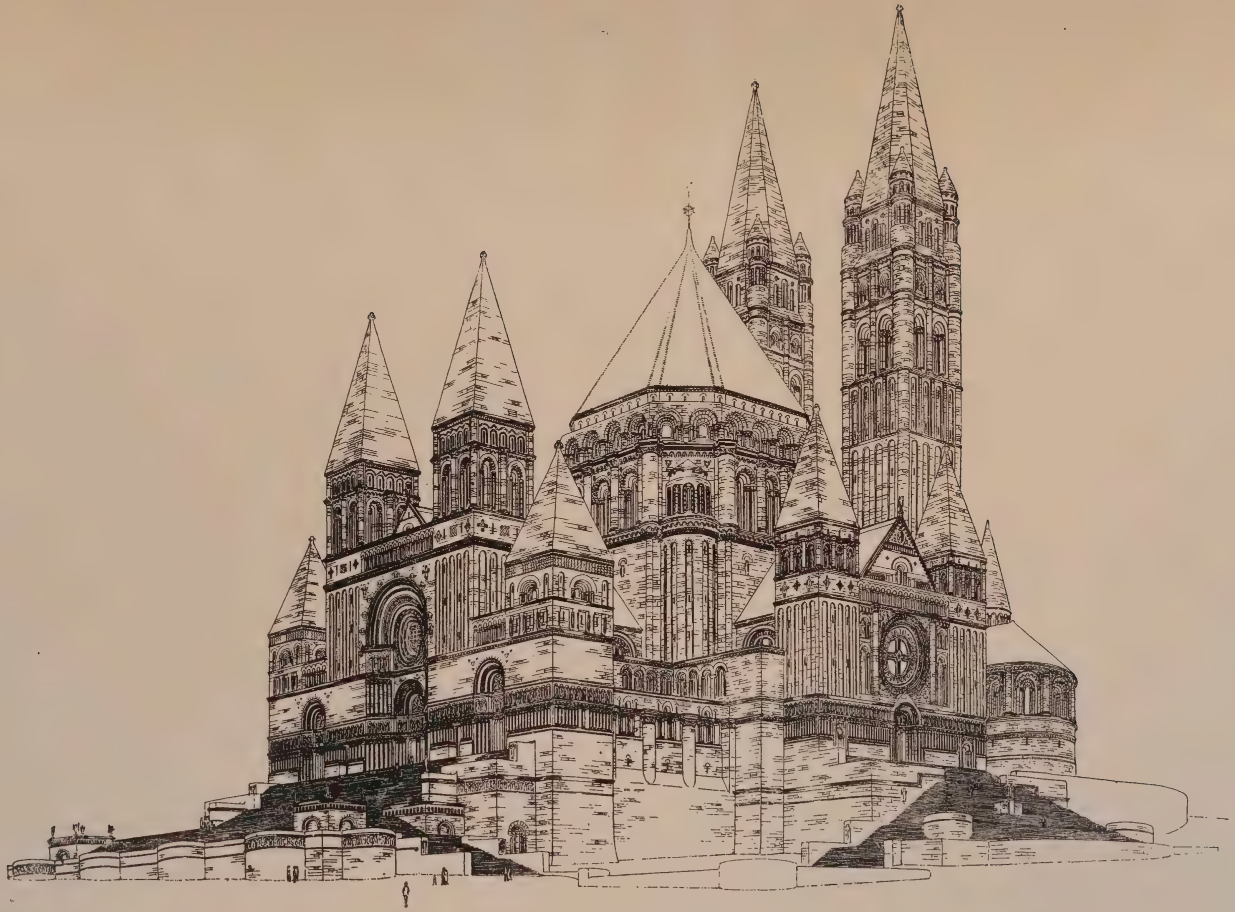
Harvey Ellis.

During his training at West Point he was sent on a surveying party to Mt. Marcy in the Adirondacks and is said to have made free-hand sketches and "guessed" at the profiles, and to have succeeded so well with his guesses that his map was later found to be more nearly accurate than the earlier "careful" surveys by which his work was "checked." In 1875 he came to New York and began the study of architecture in the office of Arthur Gilman. A few years later he went to Albany, N. Y., where he studied painting under Edward White. Then, during the early eighties he went to Rochester, N. Y., to join his brother, Charles Ellis, in the practice of architecture; but in 1885 he went "west"—that is to say, as far "west" as Minnesota and later to Missouri. There he remained ten years, returning to Rochester for another five or six years and finally went to Syracuse, N. Y., where he spent the remaining years of his life.

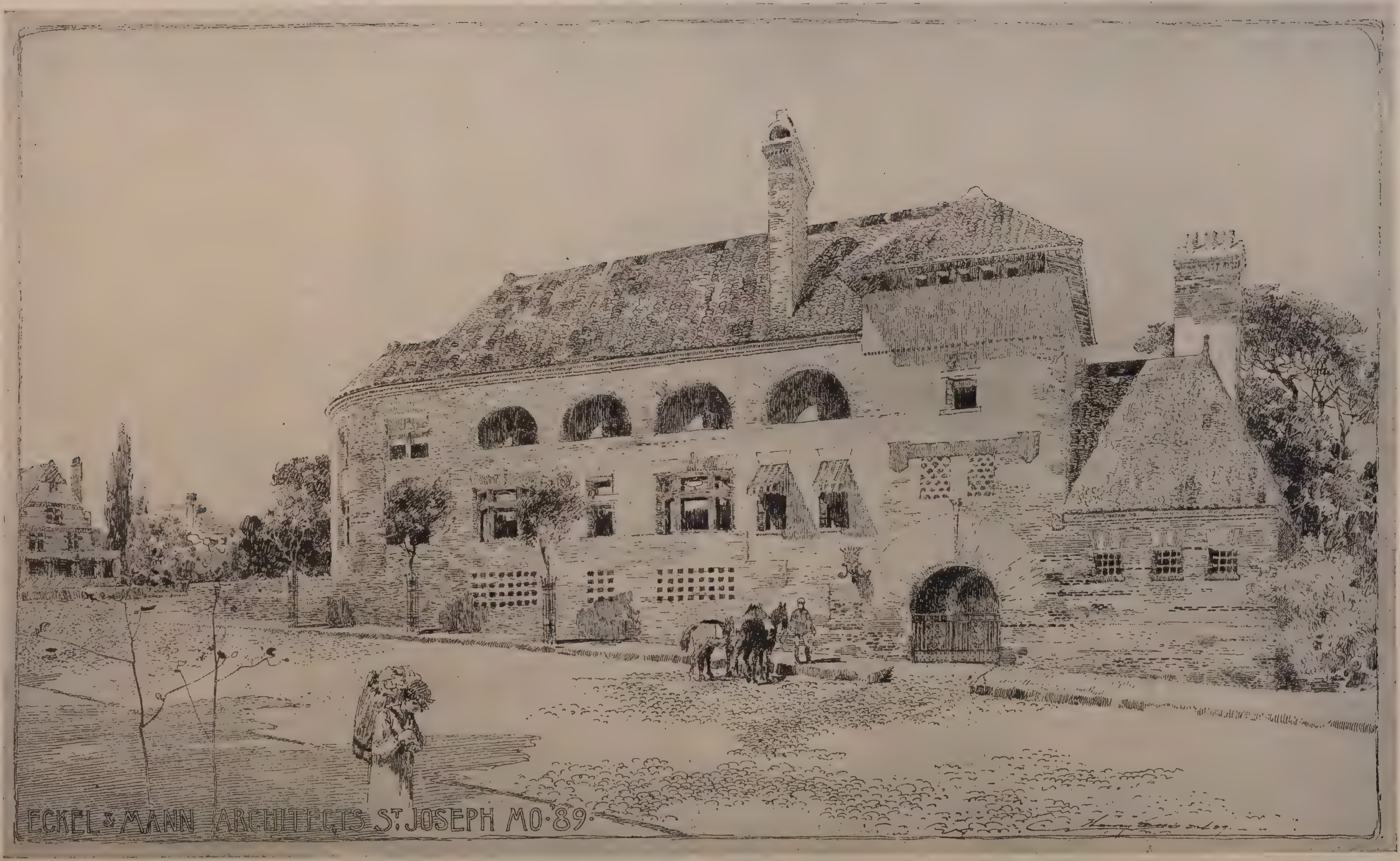
His associations in the east were among people of learning, abilities of a high order and of refinement. At Albany he became acquainted with H. H. Richardson whom he described in his own amusing way as "a magnificent big brute"—going on to state his admiration of the "big brute" in unstinted terms of praise. His earliest designs, made while still at New York, bore evidence of study of the Italian transitional period between Gothic and Renaissance influences; but after meeting Richardson and seeing some of his work, he went west filled with enthusiasm for the Richardsonian Romanesque. Gifted with a splendid imagination, a fine sense of composition, and an instinctive understanding of the beautiful, he had needed but little technical training to fit him for all—and far more than all—that his career was to require of him. The west, in a way, afforded him great opportunities—to design for the use of rough-hewn materials in great picturesque piles. In another way it all but ruined his life; for as Stocpool has said of François Villon: "when he wasn't in bad company he was always in the best"—as far as that went. Like the small Canadian town which advertised itself "the best in the west by a dam site," it probably lacked at that time, certain amenities essential to the well-being of the thorough going artist that Ellis was. Among them, competition, intelligent and appreciative criticism and honest understanding of his endeavors. He was consequently almost wholly without companionship of men of his own intellectual class during his long sojourn in the prairie cities and except when "buried" in producing some fancilful decoration or architectural design was depressed and unhappy. However he kept that so well concealed beneath an always apparent good humor and flow of bright comment that few, even of his inates suspected it. His marriage was not altogether fortunate and would have been conducive to despair in a weaker character. Realizing that all was not going to his satisfaction he broke away from habits and acquaint-



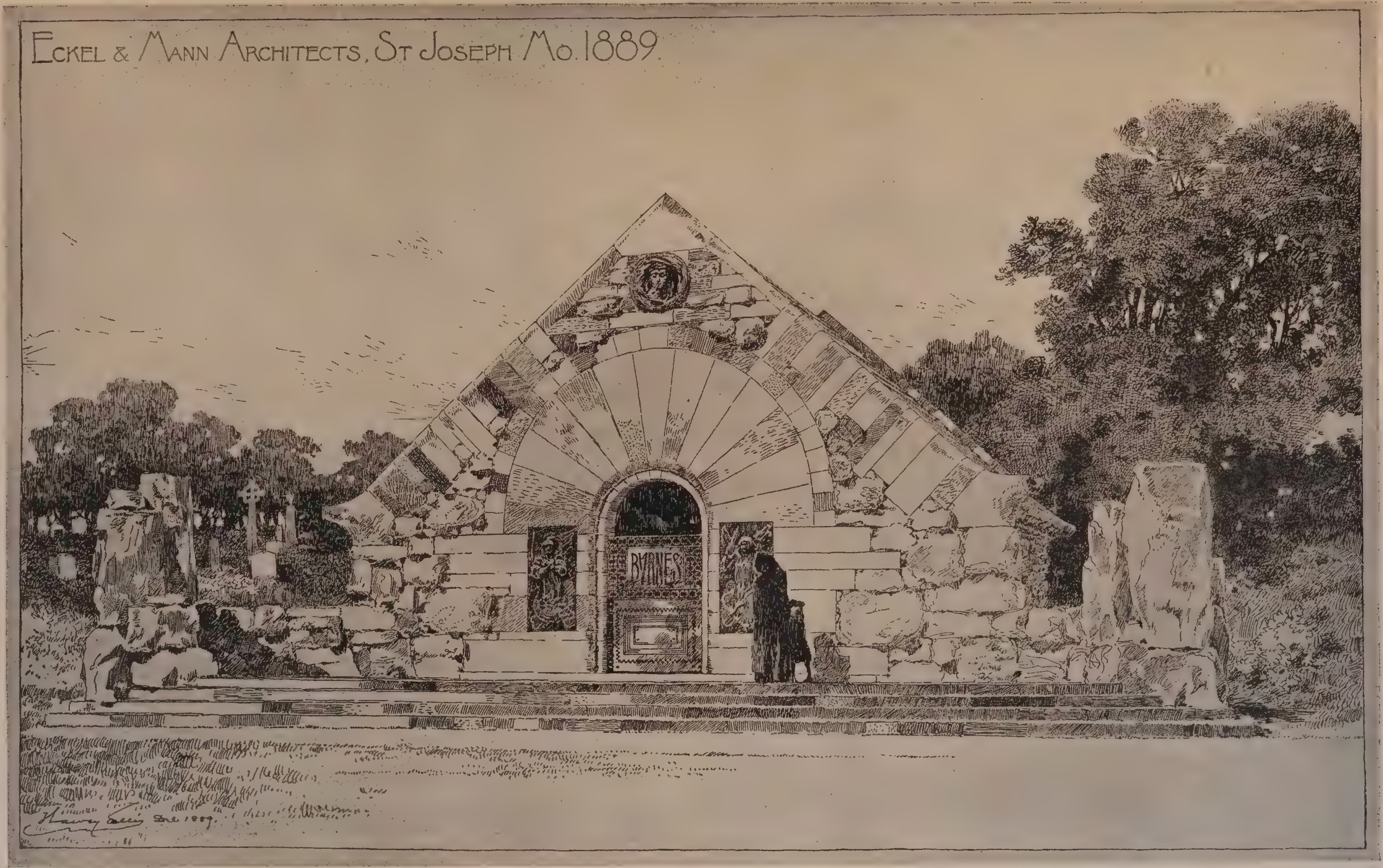
Pen and Ink Sketch by Harvey Ellis.



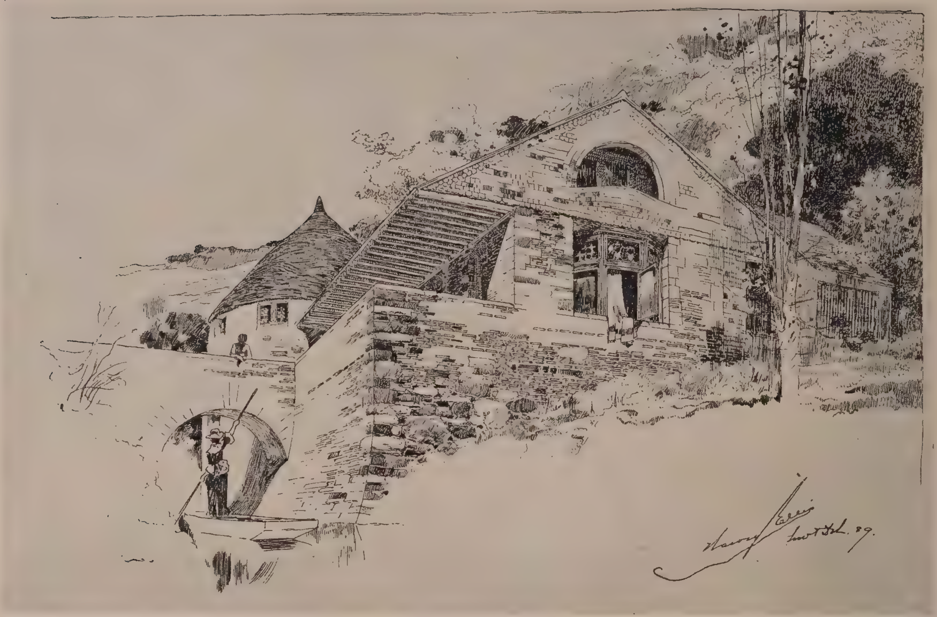
Drawing by Harvey Ellis


ECKEL & MANN ARCHITECTS ST. JOSEPH MO·89·

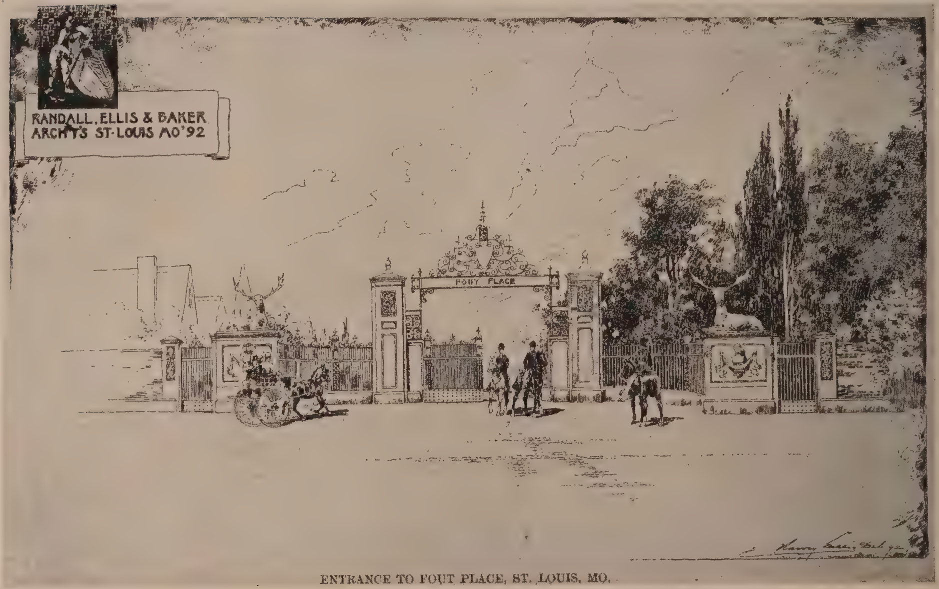
Perspective Study by Harvey Ellis.


ECKEL & MANN ARCHITECTS, ST JOSEPH MO. 1889.
BYRNES
Harvey Ellis Dec 1889.

Perspective of Tomb by Harvey Ellis.



Drawing by Harvey Ellis, "Seaside Cottage."



Drawing by Harvey Ellis.

ances which he had cultivated to his disadvantage and returned east to seek some quiet nook where he could work in peace and be away from roistering "friends." He also took to teaching—was lugged into it!—and proved successful, and he enjoyed great popularity among the young students who gathered around him—some of his pupils are among the best decorative illustrators of today. He had no understanding of the value of money and would give a five dollar bill to a street corner beggar—and borrow his street-car fare to get home. He was the easy prey of solicitors for all kinds of charities. To one of these h ewas said to have commented: "Art is long and artists usually short."

He was a great student and reader of history, biography, poetry, and writings upon music and the graphic arts. He was also a shrewd judge of human nature—in spite of which he permitted himself to be continually cajoled into giving away his sketches, and even drawings, paintings and etchings upon which he had often spent several days' or weeks' time. While he knew at once the thoughts or motive of every new admirer and would predict what would "happen next"; and was well experienced in merely being used for somebody's else purposes, he never became "hard boiled." But he sometimes "came back" with a sally that left a chuckle to last a life time with those who knew about it. On one occasion a "friend"—he was a very superior friend—wrote an article about Ellis and his work. It contained much praise but some rabid criticism. I did not like it and told Ellis I thought it "rotten." "Well," he said, with a grin, "I've written an article about *him,* and I have described him as a 'young man of *model deportment!'*" Several years passed before Booth Tarkington pictured "Penrod" as taking umbrage at being called "a little gentleman."

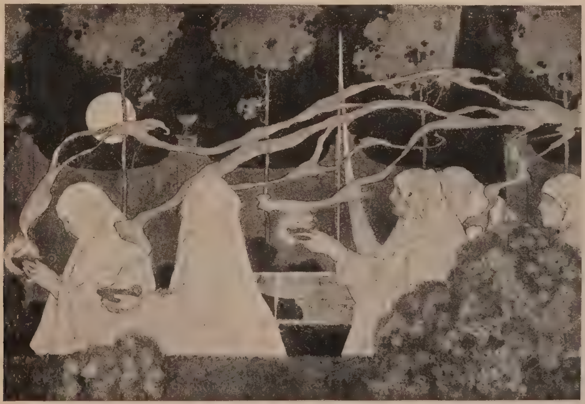
He took a lively interest in the artistic work of other men and was as familiar with that of the old and modern Japanese print-makers as with the paintings of Valesquez and Puvis de Chavannes. He greatly admired the drawings of Boutet de Monvel and was among the earliest to take note and draw the attention of his students to the work of Guerin, Parrish and Peixotto. No work of any contemporary architect escaped his observation and comment, and he went so far as to watch the progress of the students in the several schools of architecture. He was helpful—even enthusiastic as to the future of architecture in the United States; and predicted at the very outset of the competitions of the Society of Beaux Arts Architects that they would develop a national school of the greatest importance. While his work was far from academic in its leanings he admired scholarly designs and was full of praise of good classical studies. He held a very high estimate of Thomas Jefferson as an architect. During the evenings of one summer at his home when we worked together on some architectural studies, the opportunity presented itself to observe the man free of inhibitions of the day and working as he chose, for the fun of it.

He sat in a comfortable chair and worked with his board set upon an easel; used a soft pencil, and with the exception of a few long lines, upon which he used the T-square, drew his plans as well as elevations with a free-hand line. He also drew his perspective without using vanishing points or other mechanical means of assistance, but depending on eye and imagination as guides.

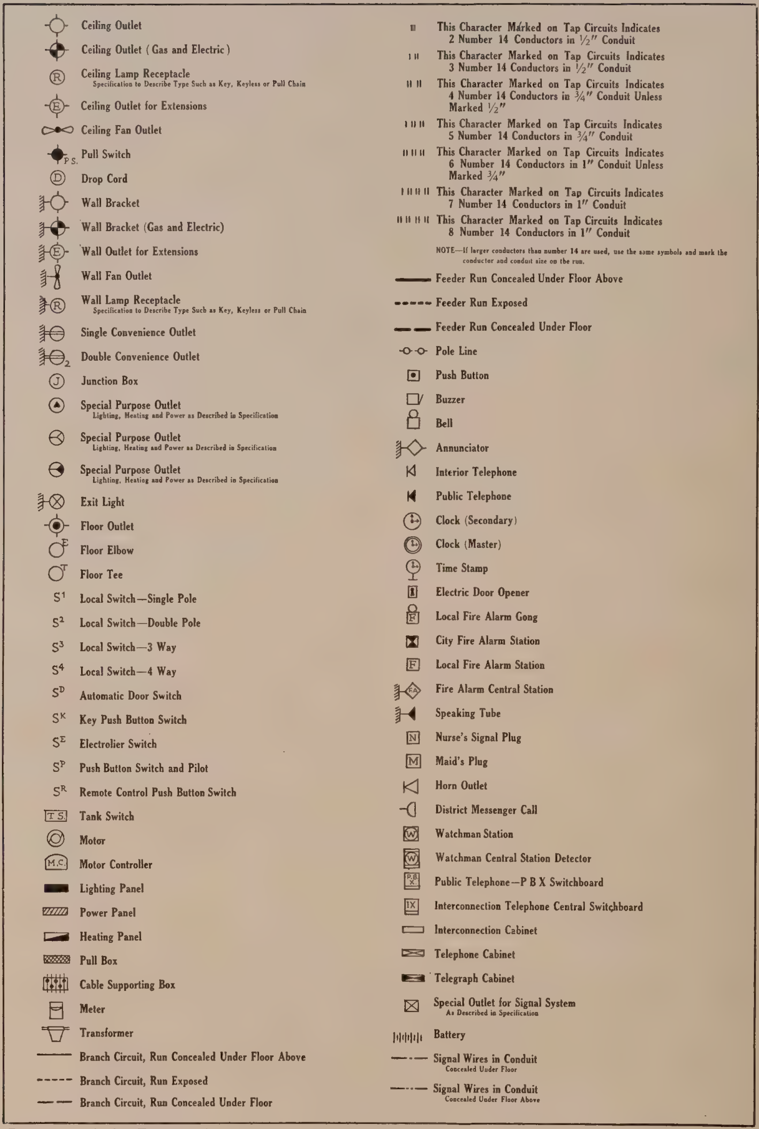
The books in his library were not numerous but they were choice as to subjects, and as volumes—for he was a book-lover and was as interested in the fine bindings and printing as in the literature and illustrations. He used his books for reference but not for purposes of copying.

His method of attack was interesting: he would sit a long time looking at a blank sheet of paper on a board set upon his easel, then begin by drawing two or three definite lines, and after a further period of deliberation, would proceed to complete the drawing in pencil, or in beautiful light charcoal lines, and finally ink it in—which he did with a large pen and a strong wavy line. He drew very rapidly

(*Continued on page 79*)



The Wise Virgins—Drawn by Harvey Ellis.



Ceiling Outlet
Ceiling Outlet (Gas and Electric)
Ceiling Lamp Receptacle
Specification to Describe Type Such as Key, Keyless or Pull Chain
Ceiling Outlet for Extensions
Ceiling Fan Outlet
Pull Switch
Drop Cord
Wall Bracket
Wall Bracket (Gas and Electric)
Wall Outlet for Extensions
Wall Fan Outlet
Wall Lamp Receptacle
Specification to Describe Type Such as Key, Keyless or Pull Chain
Single Convenience Outlet
Double Convenience Outlet
Junction Box
Special Purpose Outlet
Lighting, Heating and Power as Described in Specification
Special Purpose Outlet
Lighting, Heating and Power as Described in Specification
Special Purpose Outlet
Lighting, Heating and Power as Described in Specification
Exit Light
Floor Outlet
Floor Elbow
Floor Tee
S^1 Local Switch—Single Pole
S^2 Local Switch—Double Pole
S^3 Local Switch—3 Way
S^4 Local Switch—4 Way
S^D Automatic Door Switch
S^K Key Push Button Switch
S^E Electrolier Switch
S^P Push Button Switch and Pilot
S^R Remote Control Push Button Switch
Tank Switch
Motor
Motor Controller
Lighting Panel
Power Panel
Heating Panel
Pull Box
Cable Supporting Box
Meter
Transformer
Branch Circuit, Run Concealed Under Floor Above
Branch Circuit, Run Exposed
Branch Circuit, Run Concealed Under Floor

This Character Marked on Tap Circuits Indicates 2 Number 14 Conductors in ½″ Conduit
This Character Marked on Tap Circuits Indicates 3 Number 14 Conductors in ½″ Conduit
This Character Marked on Tap Circuits Indicates 4 Number 14 Conductors in ¾″ Conduit Unless Marked ½″
This Character Marked on Tap Circuits Indicates 5 Number 14 Conductors in ¾″ Conduit
This Character Marked on Tap Circuits Indicates 6 Number 14 Conductors in 1″ Conduit Unless Marked ¾″
This Character Marked on Tap Circuits Indicates 7 Number 14 Conductors in 1″ Conduit
This Character Marked on Tap Circuits Indicates 8 Number 14 Conductors in 1″ Conduit

NOTE—If larger conductors than number 14 are used, use the same symbols and mark the conductor and conduit size on the run.

Feeder Run Concealed Under Floor Above
Feeder Run Exposed
Feeder Run Concealed Under Floor
Pole Line
Push Button
Buzzer
Bell
Annunciator
Interior Telephone
Public Telephone
Clock (Secondary)
Clock (Master)
Time Stamp
Electric Door Opener
Local Fire Alarm Gong
City Fire Alarm Station
Local Fire Alarm Station
Fire Alarm Central Station
Speaking Tube
Nurse's Signal Plug
Maid's Plug
Horn Outlet
District Messenger Call
Watchman Station
Watchman Central Station Detector
Public Telephone—P B X Switchboard
Interconnection Telephone Central Switchboard
Interconnection Cabinet
Telephone Cabinet
Telegraph Cabinet
Special Outlet for Signal System
As Described in Specification
Battery
Signal Wires in Conduit
Concealed Under Floor
Signal Wires in Conduit
Concealed Under Floor Above

Courtesy of the Electragist.

STANDARD SYMBOLS FOR WIRING PLANS

As recommended and adopted by the American Institute of Architects, the Association of Electragists, International and the American Institute of Electrical Engineering Standards Committee on March 6, 1924.

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THE AMERICAN ACADEMY IN ROME

FROM letters recently received by C. Grant LaFarge, Secretary of the American Academy in Rome, from Gorham P. Stevens, Director, we quote the following items:

"The month of May has been a busy one—it has been the month of our Annual Exhibition and Concert, and as Mr. Canziani, the Superintendent of Buildings had to undergo a serious operation, all of us have taken off our coats and pitched in. Prof. Fairbanks arranged the exhibits splendidly, and Prof. Lamond licked his seventy-six musicians into shape in an incredibly short time. We had rain and wind both before and after the Exhibition, but most fortunately the sun smiled upon us at just the right moment. The concert was given in the coutryard, and, as the latter is only covered with canvas, wind and rain are important factors. The American Ambassador and Mrs. Fletcher were the guests of honor, and about five hundred people were present. The first event of the afternoon was a paper by Senior Architect Hafner on the Dome of St. Peter's; the lecture room was crowded. I am sorry to say that we were weak in painting this year. Among those present at the exhibition were the directors of the French Academy, the British School, the Spanish Academy, the French Archaeological School, and the Royal Academy of the S. Cecilia.

"Both the British School and the French Academy held their exhibitions during the month; they were interesting.

"Musician Hanson has been offered the directorship of the Eastman School of Music in the University of Rochester, New York. He will have grave responsibilities, for there are to be twenty-five professors under him and two thousand pupils.

"One more student has registered with us, namely, Sculptor Antonio di Filippo, who holds a Fellowship from the Italian American Arts Association.

The following gifts have come in:

$200 from Miss Agnes M. Carpenter for helping in cataloguing the Library

Lire 100 from Mrs. W. T. Jackson, to be expended at the discretion of the Director.

"Mr. Charles A. Platt spent a few days in Rome. He went through the studios and lunched with the Staff and Fellows, making a speech which did us all good.

"Mrs. E. H. Harriman remained in Rome about two weeks. She, too, went through the studios, and bought a bas-relief from Senior Sculptor Amateis, with the understanding that she is to have it if the Trustees do not retain it.

"Prof. Francis W. Kelsey has likewise passed through Rome, after a successful trip to Constantinople and Egypt. He has offered a fellowship for next year to Architect Clay of Yale, who was with us this year—it is this architect, who, with Miss Van Deman, so cleverly restored the Neronian Sacred Way in the Forum.

"The son of Mr. Carrère, of Carrère and Hastings, has established himself in Florence as a practicing architect. He has very generously offered to make his office the headquarters for our men while in Florence, and to assist them in measuring and seeing the monuments and villas of Tuscany.

"On May 3rd the American delegates, of which the American Ambassador was Chairman, of an International Congress of Agriculture, which was being held in Rome, gave a reception in the Villa Aurelia to all the delegates of of the Congress. There were over two hundred present. The Department of State of the United States of America had asked for the use of the villa.

"Finally, the Chilian Ambassador, through Ambassador Fletcher, is trying to make some arrangement, whereby art students from his country may be affiliated with the American Academy in Rome."

From a letter recently received from Frank P. Fairbanks, Professor in Charge, School of Fine Arts, we quote the following items:

"We have just concluded our annual spring exhibition, showing a total number of 104 works.

"The departure this year was in having only the architecture and paintings shown in the living rooms of the main building, allowing the sculpture to remain in each of the sculptors' studios. There were 29 pieces of finished and uncompleted sculpture shown in this manner. The visitors to the exhibition were better able to identify the personalities of the men, besides finding much of interest in studying the work in progress in the individual studios.

"There are sixteen men in residence at the present time. Of the senior men Hafner, architect, has completed his study of the approach to St. Peter's and after a last glance about Rome will start on his final travels before sailing. Amateis, sculptor, has begun his final group composition, while Schwarz, painter, has concluded his work and is travelling.

"Of the second year fellows, Marceau, architect, has completed the plan, elevation and section of his Pazzi Chapel, required second year work. Stevens, sculptor, is putting into plaster his single standing figure of a girl. Floegel, painter, is travelling.

"Deam, first year architect, and Newton, landscape architect, are away. Meyer, sculptor, has completed his first year figure and Bradford is preparing for his required copy.

"All four composers, three classicists and two visiting architects are in residence."

THE FIFTH AVENUE ASSOCIATION PRIZE FOR COVER DESIGN AWARDED TO ERNEST CLEGG OF NEW YORK

THE Fifth Avenue Association competition for the best cover design for its Centennial Book: *"Fifth Avenue: Old and New*—1824-1924," resulted in the submission of one hundred and twenty-five drawings, seventy-five from New York City and the balance from New England States and the Middle West. The Jury of Award, comprising Charles Dana Gibson, Chairman, F. D. Casey, Charles B. Falls, Harrison Fisher and Penrhyn Stanlaws, Art Members, and Melville F. Stone, Chairman, Arthur Brisbane, John C. Martin, Frank A. Munsey, Ogden Reid and Herbert Bayard Swope, Lay Members, gave the decision which carries with it a cash prize of five hundred dollars to Earnest Clegg.

The central feature of Mr. Clegg's design is the old map of Fifth Avenue and of New York, as of 1824. Around this map are scenes of long ago and of today, every detail authentic, and the contrast emphasized by the Fifth Avenue Traffic Tower (that symbol of engineering efficiency joined to architectural beauty) and the old horse-drawn turnout of the middle of the nineteenth century. One insert is Fifth Avenue and Forty-second Street today, the traffic tower flanking the Public Library.

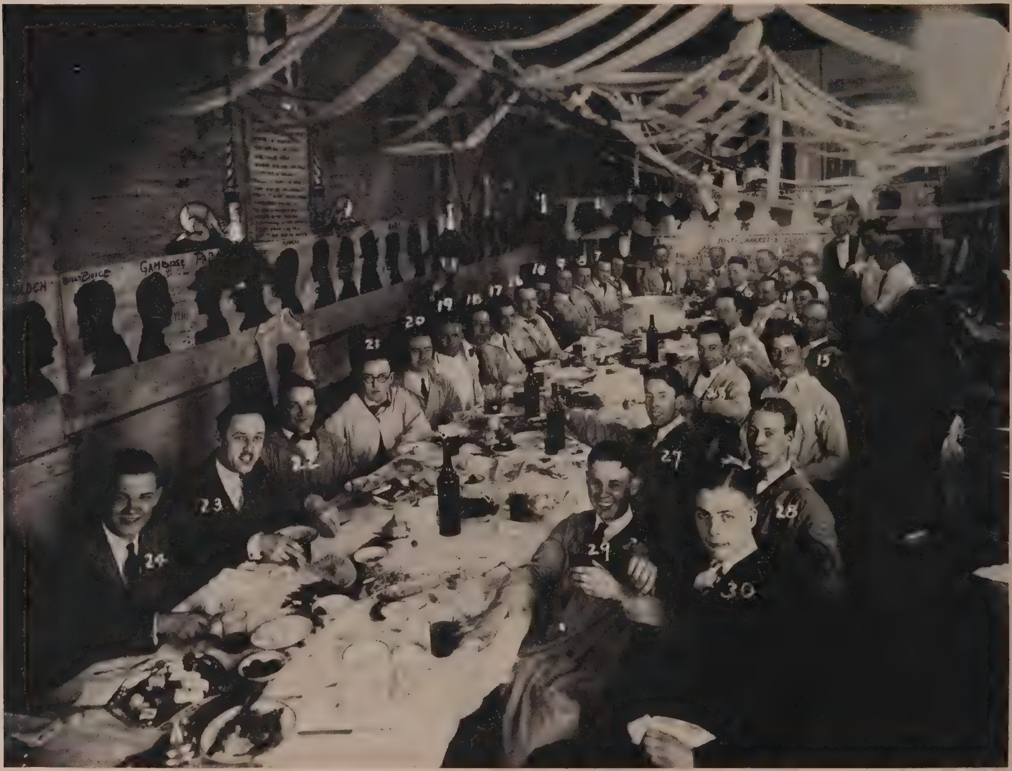
ATELIER HIRONS

THE Atelier has two men in the Paris Prize Final again this year, making seven in the past five years who have taken the competition under Mr. Hirons, besides Deam, winner of the Rome prize last year, who studied under Mr. Hirons while at Columbia. It has just been announced that Gambaro has won a scholarship at Princeton for next year, submitting the best projet in a special competition. We will miss our Secretary and Treasurer, but wish him the best of luck.

We hope to have the two best projets in the Paris prize this year at last, but without any H.C.; and with half the Atelier "niggering" nights it looks more than probable. The Atelier was very hard hit last year, but has come back strong and has two more men in this year. The officers this year are Massier Paul Pablo Simonson, Sous-Massier Andy Fustonian Euston, Secretary-Treasurer, James Gambol Gamboge Gambaro, lightweight boxing champion and short-change artist of the Atelier.

The annual dinner and celebration of our fifteenth anniversary was held in the Atelier on May 26th. The Atelier was tastefully decorated for the occasion; rolls of Dennison's softest tissue streamed from the ceiling, garlands adorned the tables, and festoons of garbage covered the floor. Our guests of honor included the Patron, Mr. Gurd, who is responsible for the origin of the Atelier, and takes his responsibility with due gravity; Mr. Koyl of Atelier Corbett-Koyl; Mr. Charles R. Morrison, Secretary of the Beaux Arts; Babitsky, Logeist, of Atelier Wynkoop Seymour; S. R. Moore and A. F. Euston, Logeists; R. Banks Thomas, Sr., and R. de Ghetto, Logeist in 1923; Massier Simonson presided and acted as Toastmaster. At the end of the dinner toasts were proposed to the Patron—the success of this year's candidates—and the rapid recovery of MacLaughlin, 1920 prize winner, who is convalescing from a recent severe illness. After this the Atelier Hymn was sung, followed by other songs, and speeches by the guests. Legg gave a solo on his ukelele and bazoo, but further tortures were barred. The dinner then lapsed into informality and broke up (literally) at a late hour.

The Atelier has been divided into two camps for the Paris Prize, each candidate having his own "niggers" and half the room. The space in the middle of the room is left empty for boxing exhibitions which we always have at this time of the year, and the first meeting of the Hirons A. C. will take place very shortly. As each fellow in the Atelier looks forward to being Logeist at some future date, niggering on the Paris Prize is taken seriously as the best training possible. The following have been selected as



Annual Dinner of Atelier Hirons.

1. *The Patron,* 2. *Mr. Morrison, Sec. of the Beaux-Arts Institute,* 3. *Mr. Gurd,* 4. *Mr. Koyl, Atelier Corbett-Koyl,* 5. *Massier Simonson,* 6. *Sous-Massier Euston, Logeist,* 7. *Babitsky, Atelier Wynkoop-Seymour, Logeist,* 8. *Moore, Logeist,* 9. *de Ghetto,* 1923 *Logeist,* 10. *MacCathern,* 11. *Thomas,* 1923 *Logeist,* 12. *Gambaro, Sec. Treas.,* 13. *Golden,* 14. *Baum,* 15. *Frohwerk,* 16. *Singer,* 17. *Ferrari,* 18. *Olschner,* 19. *Judge,* 20. *Kirkpatrick,* 21. *Delamare,* 22. *La Susa,* 23. *Martin,* 24. *Angilly,* 25. *Turcotte,* 26. *Swenson.* 27. *Harrison.* 28. *Hatch,* 29. *Legg,* 30. *Poehler.*

regular niggers, others dropping in occasionally, or when not required at their offices by heartless employers. "Fustonians"—Thomas, Simonson, Rudy de Ghetto, Gambaro, Hank Van der Lyn, Diamond-nose Baum, Booby Hatch, Roy Pullyer Legg, Fred Poehler and Goggles Harrison. "Morons"—Beetles Frohwerk (Louie), M. Gauthier, Ashur Url Perkins Angilly, Howard Beauxart Hays, Fat — Warridy, Hot Lickity Judge, George Mousy Kirkpatrick, Howard Geewhiz Swenson, Richard Thomas Little Dick Leslie, Susie La Susa, Moynel Murno.

AWARD OF PRINCETON ARCHITECTURAL PRIZES

Charles Henry Dornbusch and E. James Gambaro, both of New York City, were declared the winners of the Princeton University School of Architecture and announcement made by Professor E. R. Bossange, Director of the Princeton University School of Architecture and Chairman of the jury which decided the contest.

The prizes, of $600 each for the year 1924-1925, are part of a general fund for annual prizes and other special purposes which has been established in the Princeton School of Architecture by friends of the School. The winners of the contest will reside at the Graduate College of the University during the year of their tenure, and besides being required to take a course in design, offered by the School, will also have the opportunity of attending courses in the History of Architecture and the Allied Arts, in the Department of Art and Archaeology. They will be exempt from all tuition charges.

Both Dornbusch and Gambaro are skilled draftsmen and displayed unusual talent and ability in their drawings presented during the short elimination competition which lasted ten days, from May 9th to 18th, inclusive.

Dornbusch, who lives at 2276 Hampden Place, the Bronx, has studied for five years at the Columbia University School of Architecture and has had seven years of practical experience with different architectural firms of New York. At present he is connected with the office of Helmle and Corbett. He was placed second in the Le Brun Scholarships Competition and has received high awards in the competition of the Beaux-Arts Institute of Design.

Gambaro, who lives at 423 Broadway, New York, has had eight years' study in architectural work and four years' experience in the offices of Larremore V. V. Sweezy and Alexander Mackintosh, New York City. He is a graduate in architecture of the Mechanics Institute and has also studied in the City College of New York and under Atelier Hirons. He holds six values in the Class A Projets as credited by the Beaux-Arts Institute of Design. He wrote and illustrated an exceptional article published in "Architecture," October 1923, under the title of "Colonnade Row, La Grange Terrace, New York."

Dornbusch, Gambaro and R. M. Sentman of Philadelphia were chosen from all those competing by the jury on awards, which consisted of Professor Bossange, Donn Barber, Frederick A. Godley and George A. Licht.

The three men came to Princeton Tuesday, June 3rd, and conferred with Dean Andrew F. West of the Graduate School and Professor Bossange. Following the conference they were entertained at the Graduate College. After a careful consideration of the work of these three candidates, the prizes were awarded to Dornbusch and Gambaro.

Professor Bossange, who is largely responsible for the planning of the Architectural Prize Contest, came to Princeton last fall to take over the directorship of the School of Architecture, filling the vacancy left by the late Howard Crosby Butler. He was formerly the Director of the College of Fine Arts at the Carnegie Institute of Technology, Pittsburgh. While at Princeton he has already instituted a number of improvements in that department and has made a distinct success of his work.

PERSONALS

John U. Clowdsley has withdrawn from the firm of Losekann & Clowdsley and has opened an office at 309 Exchange Bldg., Stockton, Calif.

William E. Lescaze, Architect, has removed his offices to 17 East 49th Street, New York.

Herman R. Kaplan, Architect, has opened an office for the practice of architecture at 1628 Aeolian Hall Bldg., New York.

John S. Siebert, Architect, has removed his offices to Pacific Bldg., 524 F St., San Diego, Calif.

Ernest Irving Freese, Architect, has removed his offices to 5566 Pasadena Ave., Los Angeles, Calif.

George Y. Masson has been taken into partnership with Nichols & Sheppard, Architects. The firm will hereafter be known as Nichols, Sheppard & Masson, with offices in the Dowler Bldg., Windsor, Ontario.

L. T. Bengtson has formed a partnership with A. F. Wysong, formerly Wysong & Jones, for the practice of architecture under the firm name of Wysong & Bengtson with offices at 310 Professional Bldg., Charleston, W. Va. Mr. Bengtson will also maintain an office in Richmond for practice there.

Edwin L. Rothschild, Architect, has removed his offices to 917 Bankers Trust Bldg., Walnut and Juniper Streets, Philadelphia, Pa.

William H. MacLucas has retired from the firm of George and MacLucas, Architects and Engineers. D. J. Zimmerman has taken Mr. MacLucas' place and the firm is now George & Zimmerman, with offices in the Meyer-Kiser Bank Building, Indianapolis.

THE DRAFTSMAN WITH A JOB

From one of our readers, Mr. Samuel N. Crowen, Architect, Chicago, we have received the following interesting letter.

"In the May issue you have an article entitled "The Draftsman with a Job" which is of great interest to every practicing Architect and after thirty years of active practice in Architecture, I wish to state that the definition the "Architect is a draftsman with a job" is entirely wrong.

"No Architect who has an active practice can be his own draftsman, but a good many draftsmen that get a job can hang out a shingle and call themselves Architects. This is due to the unbusinesslike methods pursued by Architects permitting draftsmen knowingly in their employ to take jobs on the side. Much to my sorrow I have made the same mistake and found that a draftsman with jobs on the side concentrates so much time and effort on *the side*, that he neglects his work in the office or does so much work at home evenings that the next day he is not fit to do any work in the drafting room.

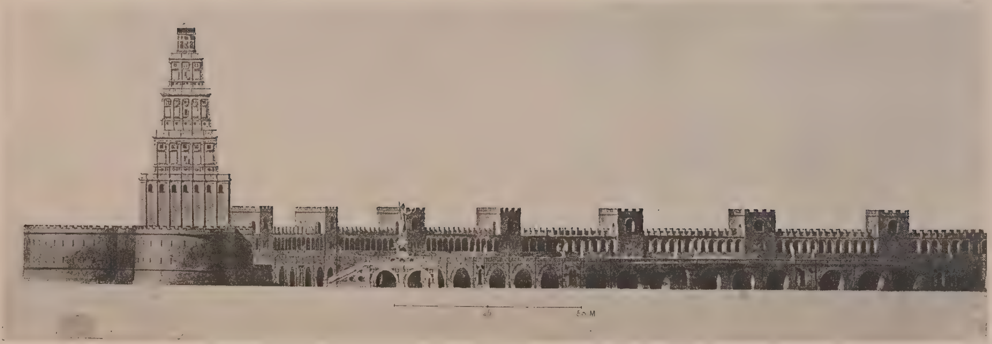
"No man can serve two masters. Either the draftsman must work for his employer, the Architect, or practice Architecture under his own name and office.

"The draftsman with a job on the side with no overhead and no expense, has a position with an income during the day time, can afford to take a job on a fraction of the usual percentage in competition with his employer. Frequently he undertakes a job that he is not altogether qualified to take and he does it on the reputation of the Architect that employs him and it reflects discredit on his employer.

"This pernicious habit has become so aggravated that it has made draftsmen dishonest to the extent of stealing employers' jobs where they can, because after a client has given some work to the Architect and he finds that the draftsmen do the work he thinks by hiring the draftsman he can get the work done cheaper and he usually pays for it in the long run. I know of a case where one of the leading firms of architects was indirectly responsible for allowing draftsmen to design a residence that was to cost approximately $35,000 and before it was finished cost over $65,000 and today the contractor and owner have gone into bankruptcy due to the fact that neither the owner nor the contractor nor the draftsmen were able to handle the *business end* of the job.

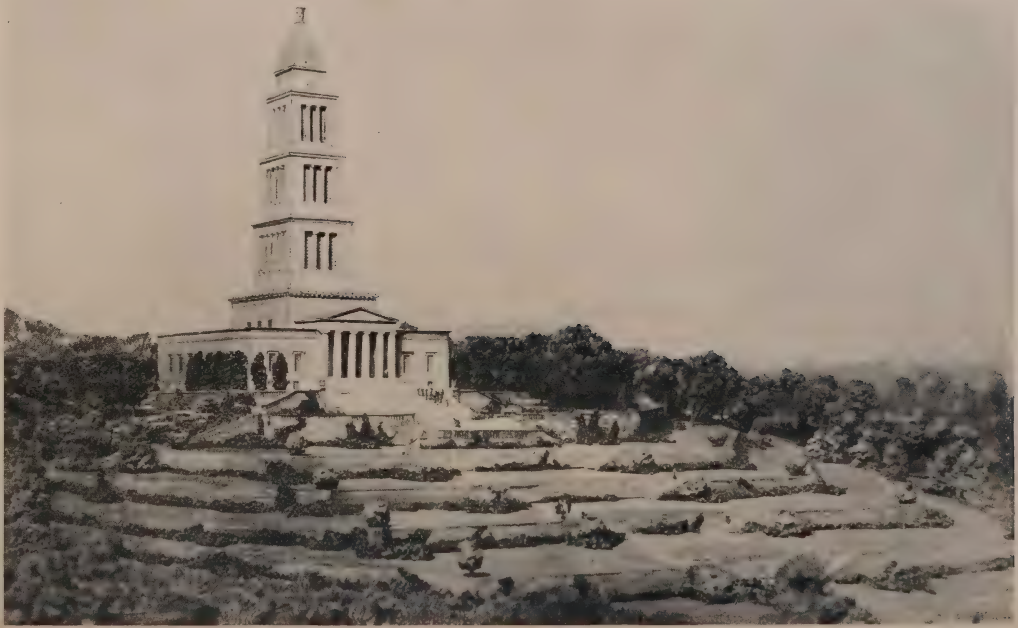
"I am writing this letter in response to your soliciting opinions from readers and asking for suggestions concerning "the Draftsman with a Job."

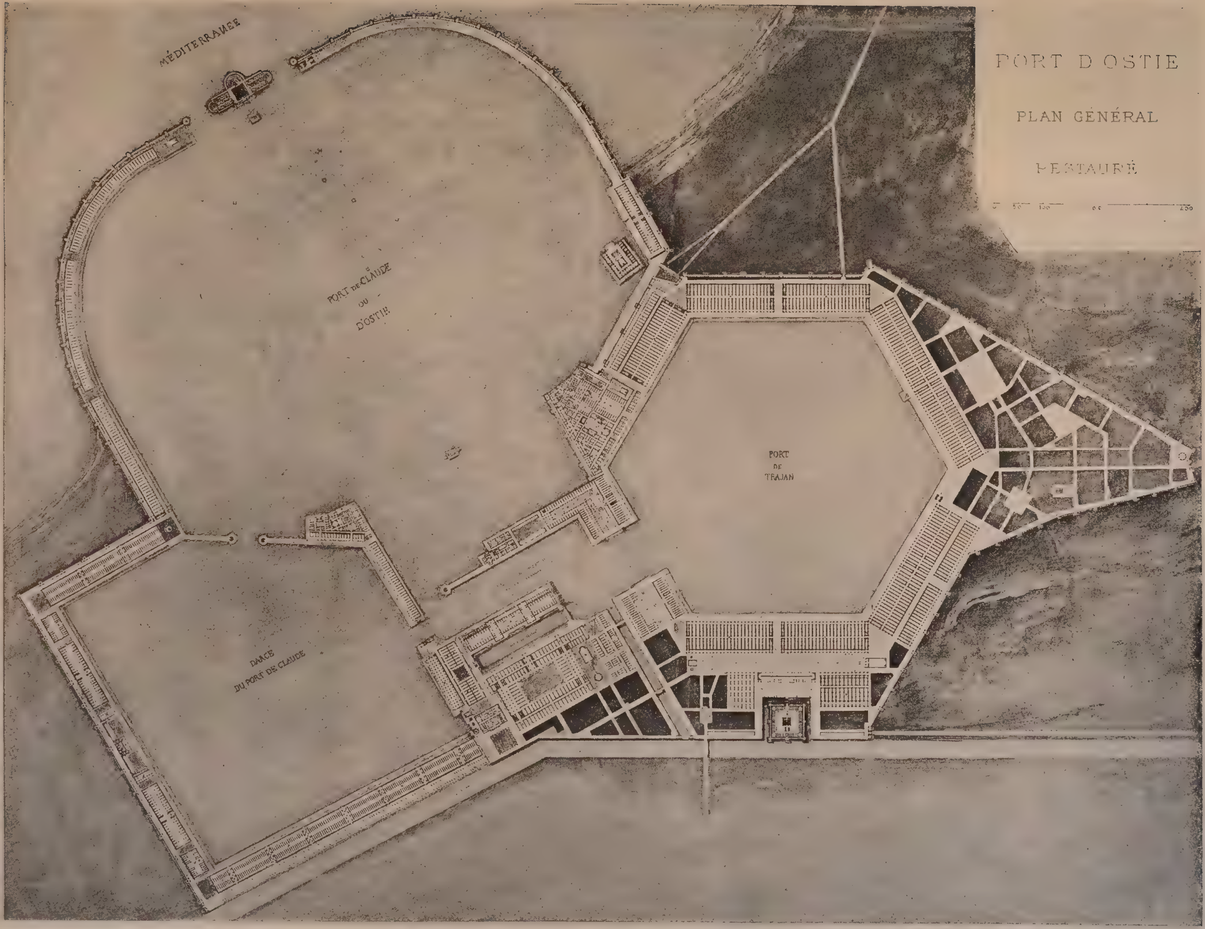
"I should also be interested in hearing from other Architects. When you get all the comments, by publishing an abstract of same, you will be rendering the profession a great service."



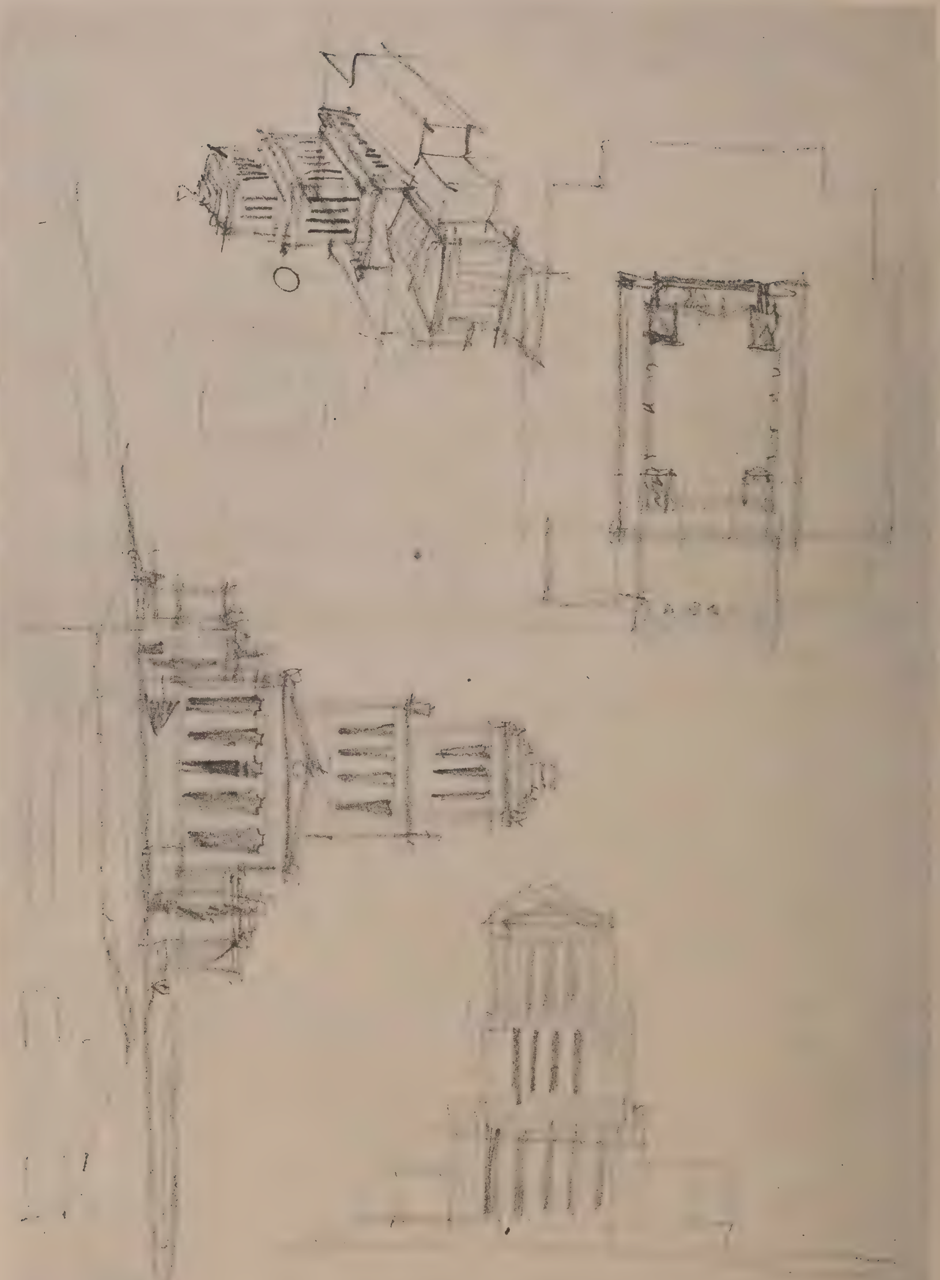
At the Left—Port of Trajan at Ostia, Restoration by M. Garrez, from which the Architects derived their inspiration for the design shown below. Other development drawings in August issue.

At the Right—The George Washington Masonic National Memorial at Alexandria, Va. Helmle & Corbett, Architects. (Photograph of Model.)





Port of Trajan at Ostia, Restoration by M. Garrez.



Sketch Studies for the George Washington Masonic National Memorial at Alexandria, Va.
Helmle & Corbett, Architects. (See pages 60 and 61.)

Life Drawing by Louis Kimmel, Second Year General Art, Pratt Institute.

PRATT INSTITUTE

THE annual exhibition of students' work at Pratt Institute, Brooklyn, New York City, was interesting and representitive of the varied activities of the Institute. One of the most interesting of these activities was the photoplay recently produced by the students of design and costume illustration who designed and built the settings, designed the costumes and enacted the play. The story was based on an old Hindu legend and research work was done at the Metropolitan Museum of Art. On another page of this issue is shown a model of one of the stage settings by Miss Frances W. Hickey, Second Year Interior Decoration, and a portion of the film showing the setting as built. Scenes from the play are also shown. A life drawing by Louis Kimmel is also shown. A design for a textile design by Miss Julia Black and an architectural model with a panoramic background by J. Bradbury Minotti were also selected for illustration, and will be shown in the next issue. Mr. Arthur L. Guptill, author of "Sketching and Rendering in Pencil," sails June 28 for Europe as instructor in sketching with the School of Art Appreciation of which Henry Turner Bailey is Director. Mr. Guptill is also one of the leaders of the travel group.

COMPENDIUM OF BUILDING DATA

THE Jual Publishing Company, 581 East 170th Street, New York, has just published a document with the above title. The author is J. Soman, designer and engineer.

It contains eleven full page charts dealing with the design and cost of composite building construction in handy usable form obviating much tedious calculation.

While the charts are based upon the New York Building Code they will be found useful in all parts of the country. The cost data for approximate estimating is presented with the idea of pointing out to the profession certain factors usually overlooked. It is a booklet containing 18 pages and cover, 8 x 11, price $1.00

A. I. A. SCHOLARSHIP AWARDED TO ISADORE SHANK

THE work of the winners of the A. I. A. medal in each of the seventeen schools which are combined in the Association of Collegiate Schools of Architecture was shown in Washington during the Fifty-seventh Annual Convention of the A. I. A. A jury of award composed of representative members of the A. I. A. made a thorough study of the entire exhibition and unanimously awarded the first Institute Travelling Scholarship to Isadore Shank of the School of Architecture of Washington University, Saint Louis, Mo.

FREE EMPLOYMENT SERVICE FOR PENCIL POINTS READERS

(*Other Items on Pages* 80 *and* 96)

Young Woman with six years' clerical experience and two years' study in interior decoration desires to connect in any capacity with an interior decorator. Any part of the country. Miss Josephine Golden, Woodside, N. Y.

Renderings, perspectives, birds' eye views, landscapes of different media by artist with wide architectural experience. T. T. De Postels Studio, 511 West 139th St., Apt 12, phone 1170.

ARCHITECTURAL BOWLING LEAGUE OF NEW YORK

THE Architectural Bowling League of New York at a regular meeting of its Board of Directors held recently at the Hotel Shelton decided to appeal to the architectural men of New York through PENCIL POINTS for their personal ideas regarding the desirability of an Architectural Club.

Practically every other large city in the United States has such a club, yet New York, the largest of them all, lacks this very essential feature for the furtherance of good fellowship in our profession. Perhaps the answer is that we have been too big to get together.

Since last October our organization has grown so rapidly that today we find ourselves handicapped by the lack of good bowling alleys in the Metropolitan District suitable to our needs.

Many of the leading Architects of the city have heartily endorsed our good work, and stand ready to advance a building loan for us to build a club house in the event that we do form a club.

Now it is up to you to speak out! Do you want a club house with all the conveniences that such a place implies, or do you not?

If you do, it would seem to me that we ought to be able to show at least two thousand (2,000) active prospective members on our books, and by active members I don't mean entry fees. What I do mean is *personal enthusiasm* and *good faith.*

If you want a club now is the time to get up and say so. Your credit is good. What we want to see is the color of your "PEP" first. We are willing to take chances on seeing the color of your money later.

The Editor of Pencil Points is willing to aid a campaign by the publication of further notices and communications and will help along the movement in every way possible.

Write your name and address on a postal card or organize a delegation in your office and send me a list of their names. Just show that you really mean business and the rest will be easy.

There is just one thing, however, to keep before you always, that no matter how many activities we may take up, our Motto will never change *"For the Furtherance of Good Fellowship in the Architectural Profession."* Norman T. Valentine, Secretary, 16 East 47th Street, New York City.

DRAWING IN "CLASS A" PROBLEMS AND COMPETITIONS

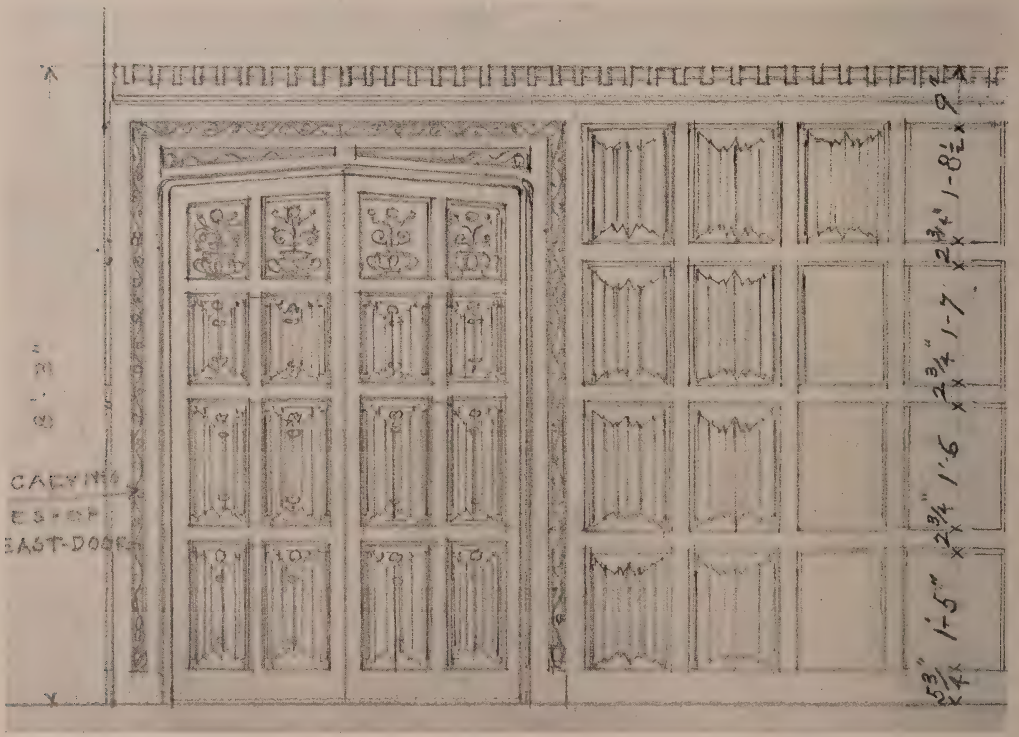
(*Continued from Page* 40)

degree of skill in *freehand* drawing. If a man has gone as far as Class A and cannot draw freehand work convincingly it would be worth his while to stop his work in design long enough to put in some time in intensive training in freehand, drawing from the antique—from casts of ornament and the figure—and from life. This can be *supplemented* but not replaced by outdoor sketching from nature. Valuable as this is it cannot be compared as a method of training with the more arduous, perhaps less interesting, study in pure drawing to be had from the cast and from life.

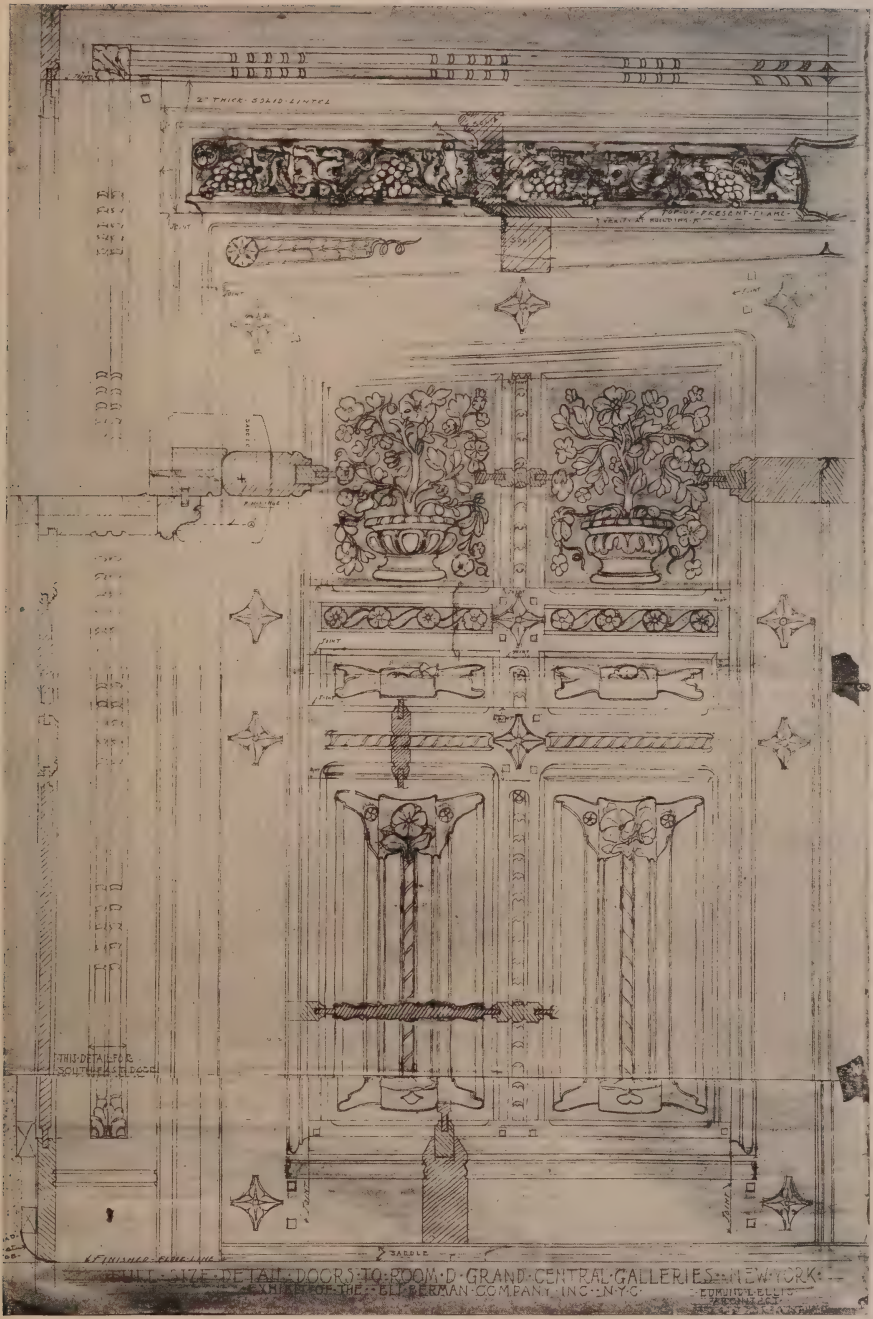
In sketching outdoors, as many different types of subjects should be chosen as possible, if the aim is to improve architectural draftsmanship—not with the idea of collecting a number of copy forms to be used in rendering, but to build up the power of visualization.

It is possible to make studies of trees, vertical trees like Lombardy poplars, spreading trees like elms, and the rounded apple tree forms. Then, too, clever studies of a single limb, the studies of the silhouette of groups of leaves close to the eye (Figure 6). These can be made in two and three hour sketches; they can also be made in rapid sketches where an effect is quickly obtained by simple means (Figure 7). Studies of rocks, hills and mountains are frequently of great use in presentation (Figures 8 and 9); even such things as small stones, a few leaves lying on the pavement, and tree shadows on the ground are used by such able renderers as Jules Guerin, Birch Burdette Long, and Otto Eggers to "compose" a drawing.

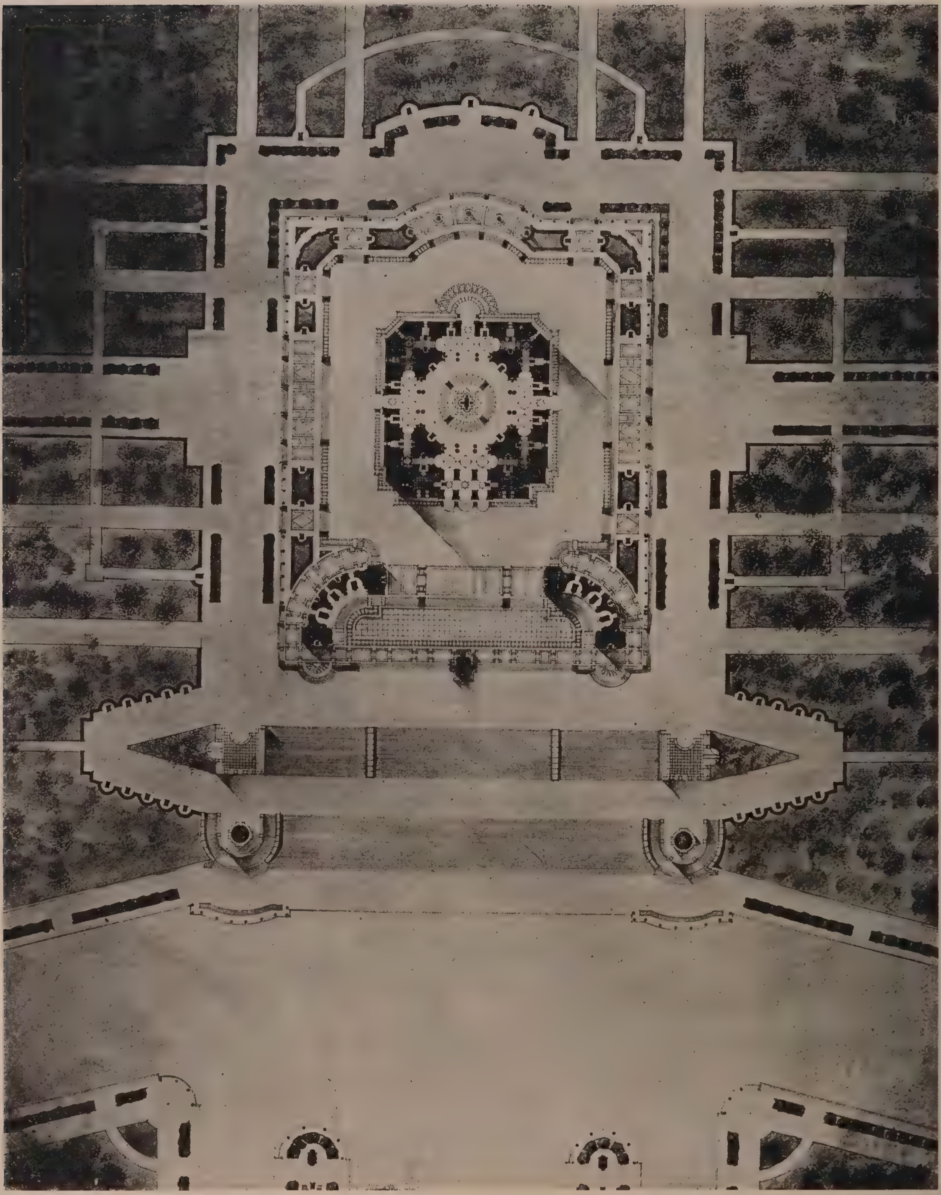
Anyone can improve his skill in draftsmanship if he is willing to make the effort, if he can keep himself at a course of training to that end. One way is to try different mediums of expression—pencil, pen and ink, monotone, and color, and then back again to India ink. To try to present the same objects in these different expressions will give many new ideas—will form a deeper vision, a clearer visualization.



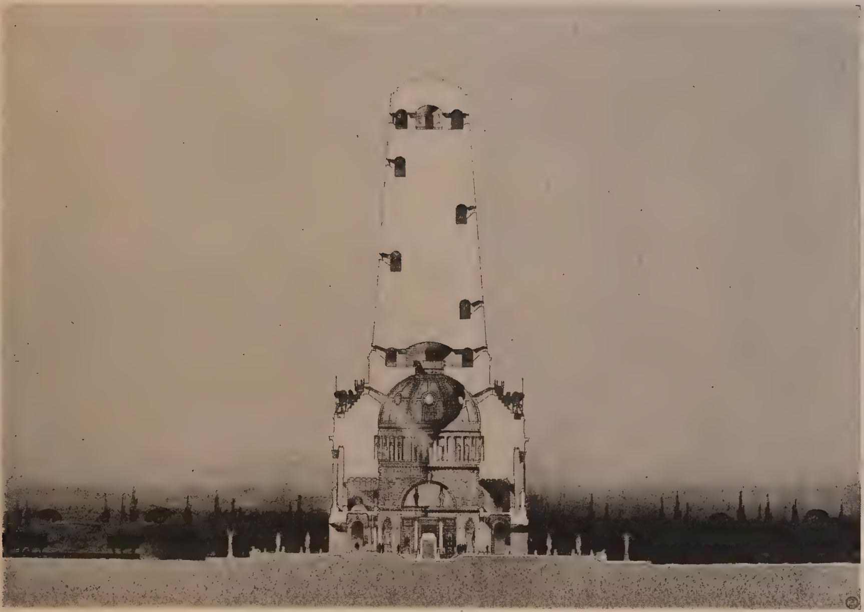
Oak Wainscot in Room D, Grand Central Galleries, New York. Edmund Ellis, Architect.
(See opposite page.)


2" THICK · SOLID · LINTEL
TOP · OF · PRESENT · FRAME
JOINT
SADDLE
THIS · DETAIL · FOR SOUTHEAST · DOOR
FINISHED · FLOOR · LINE
FULL · SIZE · DETAIL · DOORS · TO · ROOM · D · GRAND · CENTRAL · GALLERIES · NEW · YORK ·
EXHIBIT · OF · THE · ELI · BERMAN · COMPANY · INC · N · Y · C ·
EDMUND · L · ELLIS ARCHITECT

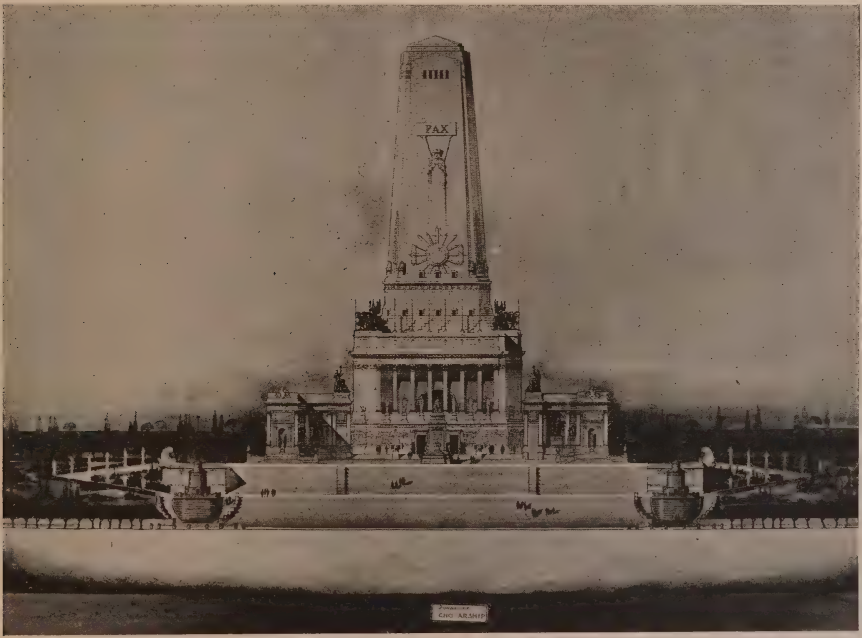
Details of Construction—Door to Room D, Exhibit of the Eli Berman Co., Inc., Grand Central Galleries, New York, Edmund Ellis, Architect.



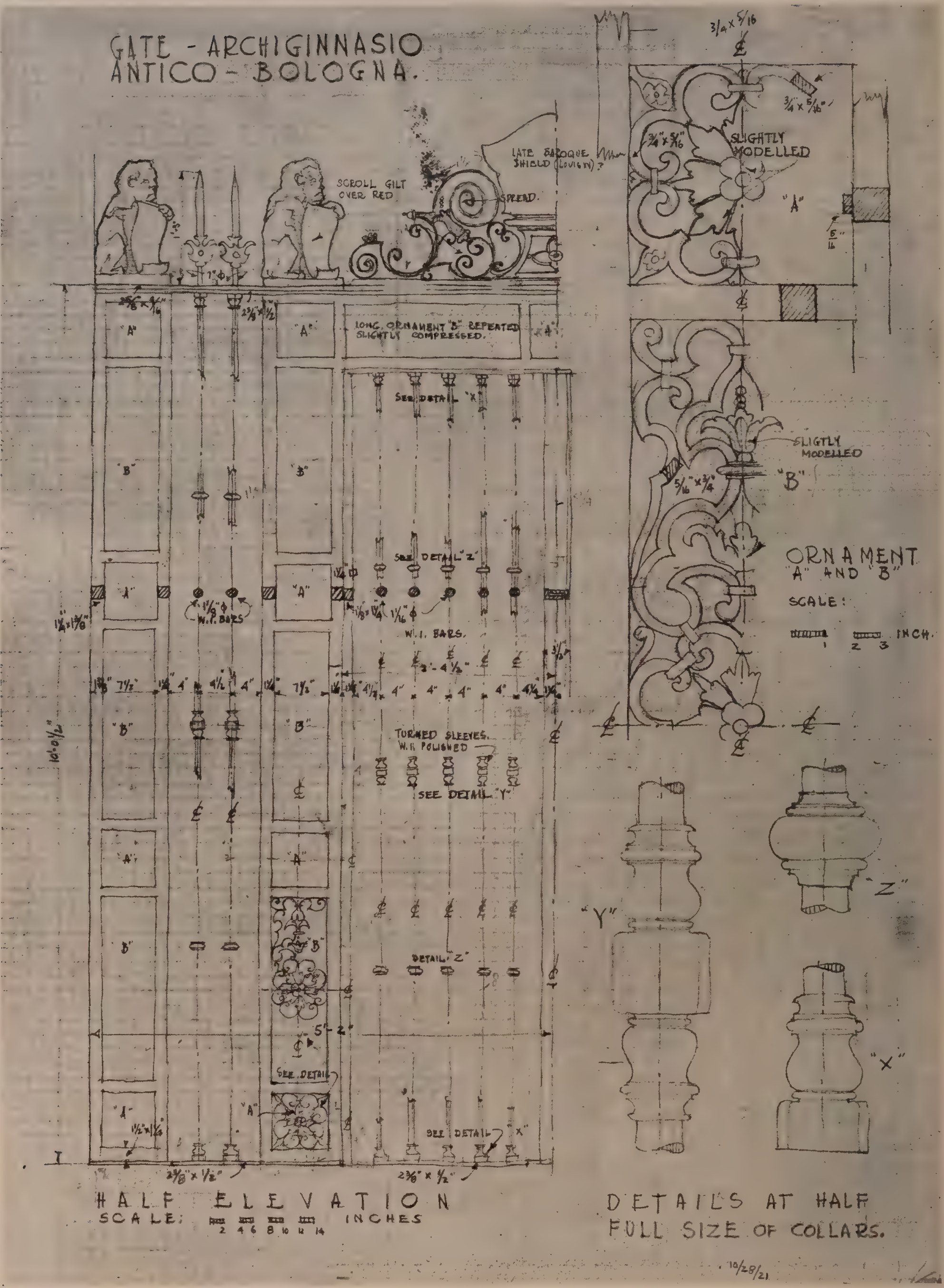
Plan of Winning Design in the Competition for the Rotch Travelling Scholarship.
By Eugene F. Kennedy, Jr.



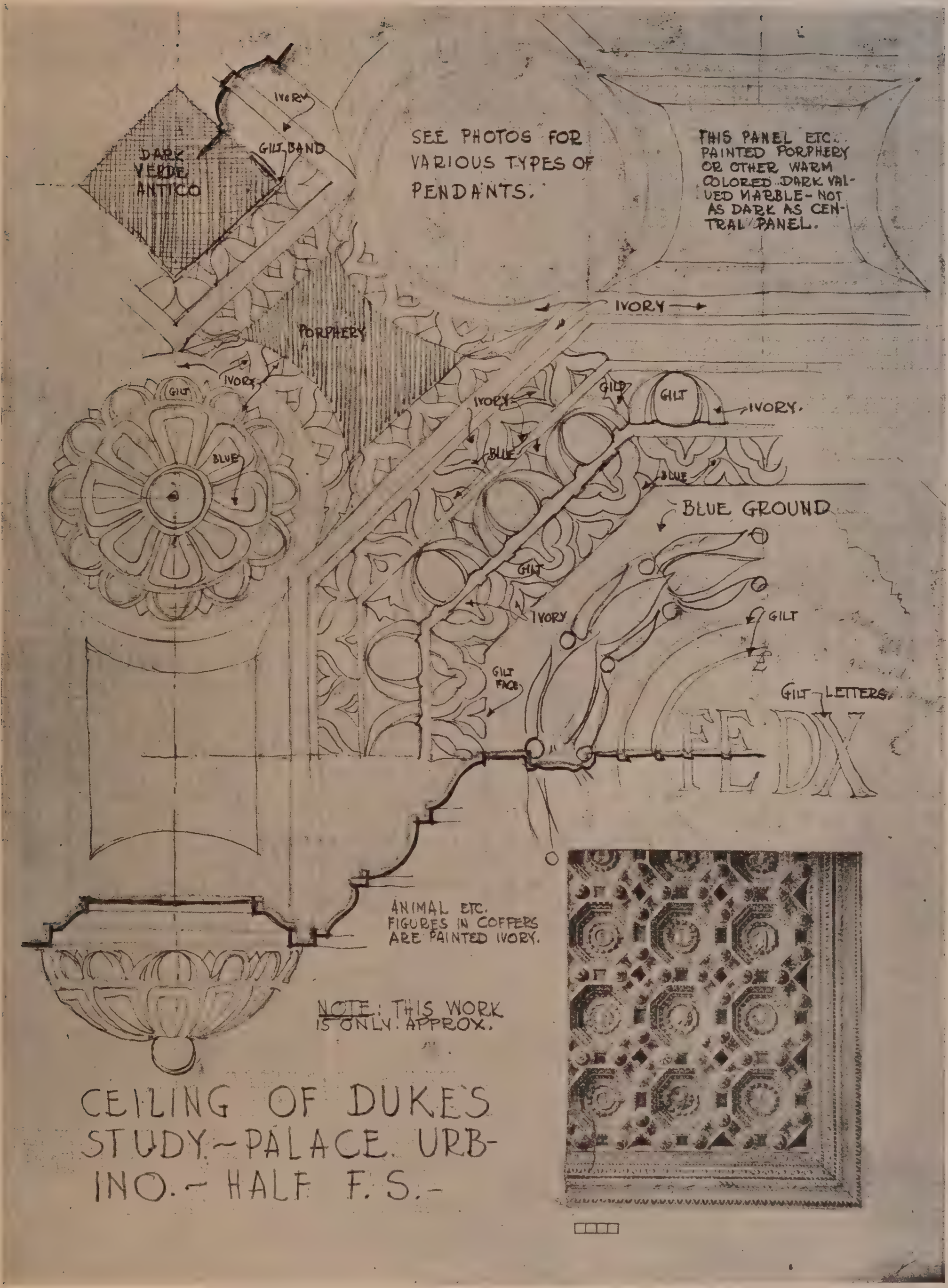
Section.



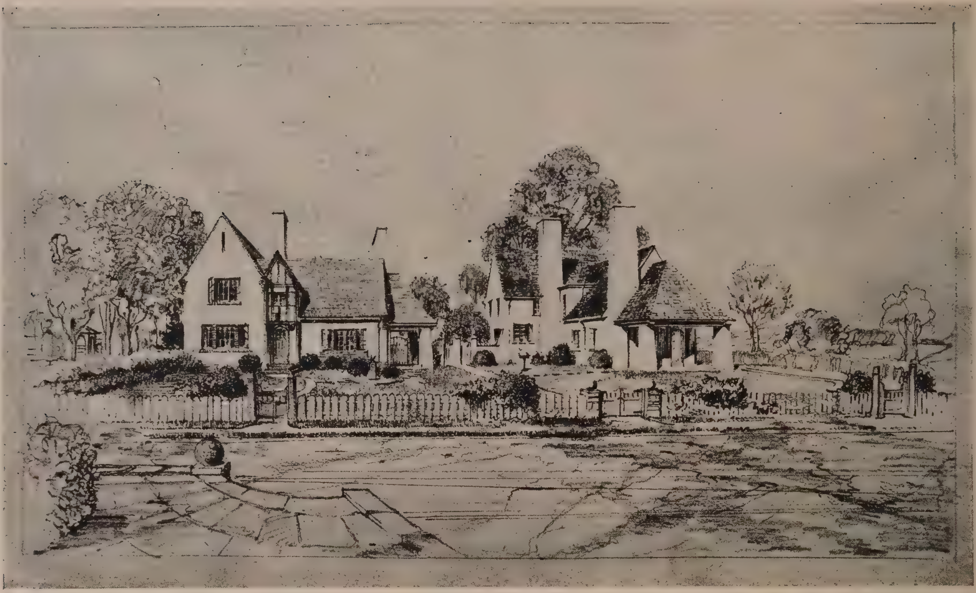
Winning Design in the Competition for The Rotch Travelling Scholarship. By Eugene F. Kennedy, Jr.

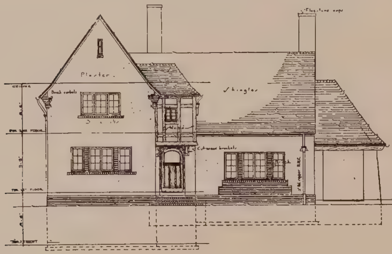


Gate—Archiginnasio Antico-Bologna. Measured and Drawn by Ernest A. Grunsfeld, Jr.

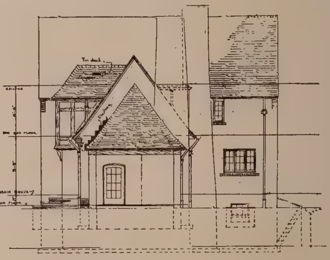

IVORY
DARK VERDE ANTICO
GILT BAND
SEE PHOTOS FOR VARIOUS TYPES OF PENDANTS.
THIS PANEL ETC. PAINTED PORPHERY OR OTHER WARM COLORED DARK VALUED MARBLE - NOT AS DARK AS CENTRAL PANEL.
IVORY
PORPHERY
IVORY
GILT
BLUE
IVORY
GILT
GILT
IVORY.
BLUE
BLUE
BLUE GROUND
GILT
IVORY
GILT
GILT FACE
GILT LETTERS
FE DX
ANIMAL ETC. FIGURES IN COFFERS ARE PAINTED IVORY.
NOTE: THIS WORK IS ONLY APPROX.
CEILING OF DUKE'S STUDY - PALACE URBINO. - HALF F. S. -

Ceiling of Duke's Study, Palace Urbino. Measured and Drawn by Ernest A. Grunsfeld, Jr.

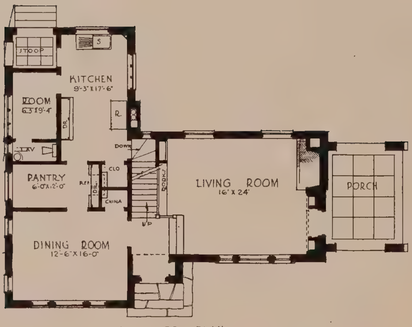




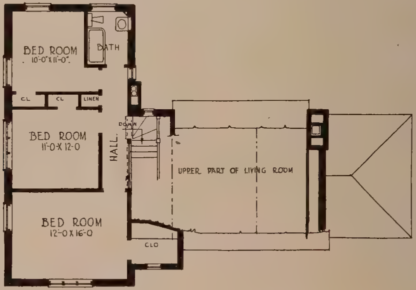
FRONT ELEVATION



RIGHT SIDE ELEVATION

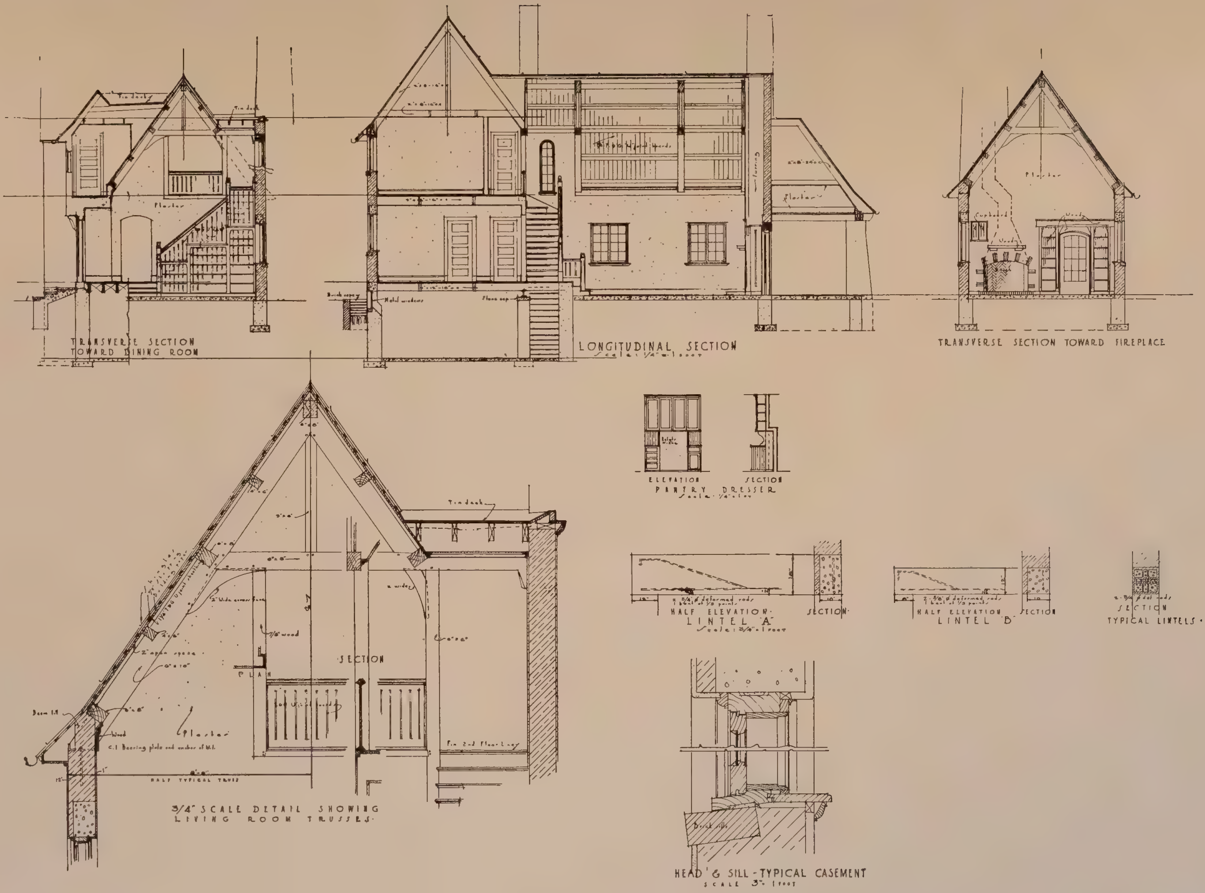


FIRST FLOOR PLAN

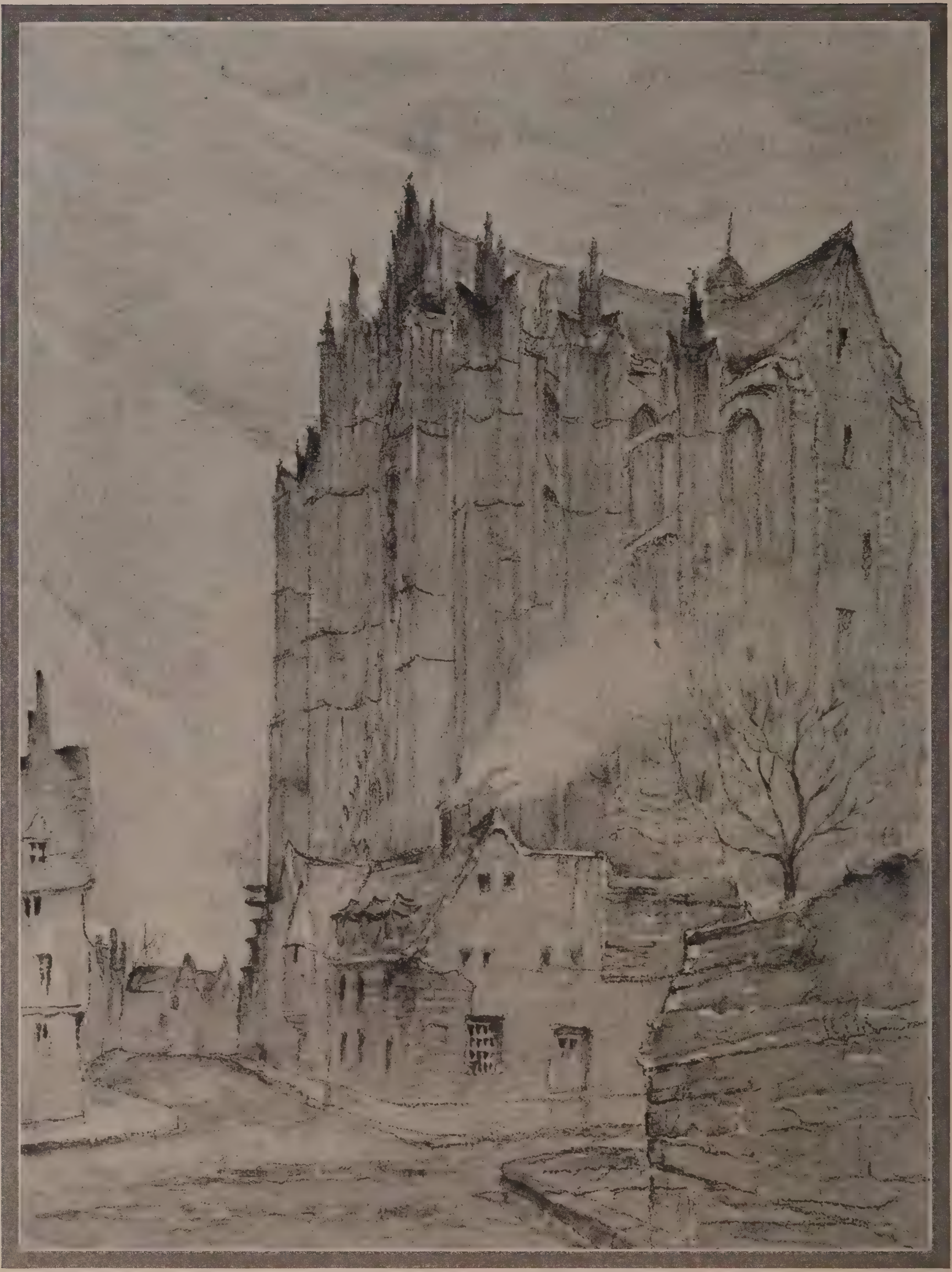


SECOND FLOOR PLAN

Residence for Mr. William Shewell Ellis at Moylan, Pa., Brown & Whiteside, Architects.



Construction Details. Residence for Mr. William Shewell Ellis at Moylan, Pa., Brown & Whiteside, Architects.



Water Color Sketch by Llewellyn Robert Price, Beauvais.

HERE *and* THERE *and* THIS *and* THAT

Conducted by RWR

DESMOND McMASTER of 66 Rosethorn Avenue, Toronto, wants to know if station RWR would be willing to broadcast a little verse. Why certainly we would. And just to prove it, here it is.

TRIOLET.

Will some one please tell me what fixatif is?
I'm anxious to know all about it.
Perhaps my quiz too inquisitive is,
Will some one please tell me what fixatif is?
How it's applied and the rest of "the biz"
Your advice—I'm helpless without it.
Will some one please tell me what fixatif is?
I'm anxious to know all about it.

Funny thing about this "fixatif." Another reader asks us for a formula which he can use in making his own. So if any Pencil Pointer has successfully made a "fixatif" that fixes won't he please write it down on a piece of paper and send it to us.

THE head draftsman of one of our local offices (New York) submits these lines with a question. Here are the lines:

Mister Semsch is a bold engineeah
But, sometimes his actions are queeah,
To find two by fo
To his slide rule he'll go.
He's weak in the headpiece I feeah.

The question is, whether it is better to be a poet or a draftsman? Our opinion is, that it is Oh! much, much better to be a draftsman.

AUSTRALIA is getting to be quite chummy. We hear something from the fellows over there every few days. Here is a paragraph from a letter just received from Ronald J. Wilson, Geelong, Victoria.

"We students of architecture in Australia being situated many thousands of miles away from the seat of architectural development are more or less limited in our vision —however a journal such as "Pencil Points" helps to keep us in touch with the activities of all architectural bodies and works the world over. I am a fourth year student of the Gordon Institute of Technology of this city and a third year articles draftsman with Laird & Buchan, architects, and in connection with my studies and daily office work I find your magazine a wonderful asset."

This international stuff is great. Let's have more of it!

THE Architectural Tennis Tournament bids fair to be quite as popular as the bowling was during the winter. At a meeting recently held at Keene's Chop House a proposed playing schedule was discussed and approval given to the grouping of contestants into sections for the preliminary matches. The following captains were appointed to arrange the schedules and keep track of the results of matches played.

Bronx, Vincent Kennedy—Dodge Reports
Brooklyn, (two sections), A. L. Muller—A. C. Bossom
A. M. Koch—P. V. Stout
Manhattan, Paul Singer—Warren & Wetmore
New Jersey, W. E. Meissner—Delano & Aldrich
Queens and L. I., W. S. Shepherd—York and Sawyer
Westchester, A. M. Duncan—Walker & Gillette

In the preliminary matches, each man will play three sets—one match—with every other man in his section and the two men winning the most matches in each section will be eligible for the semi-final round. This arrangement ensures each contestant plenty of tennis and copious opportunity to participate in the cups and medals to be awarded.

Further doings in tennis and other outdoor sports will be recorded in this reliable paper.

ONE of our subscribers asks us quite a lot of questions about fireplaces. Possibly his inquiry and the answer may be of interest to others. Anyhow here they are.

"I would greatly appreciate information concerning the proper proportioning and construction of fireplaces in general and most particularly in connection with fireplaces having large openings. The ones I now have under consideration are as follows:

1 5′ 6″ wide 5′ 0″ high at end of room 27 x 50 by 14 ft. high, flue from floor line 34 ft. high.

2 5′ 0″ wide 4′ 0″ high at side of room 20′ 6″ x 29′ 0″ x 9 ft. high, flue from floor line 32 ft. high.

3 Does the room size have any effect?

4 How big should the smoke chamber be?

5 Is one tenth of the fireplace opening a good rule for determining a flue size?

6 I have noticed that most of the larger fireplaces are designed without dampers. Is this a good practice? Are dampers located at the top of the smoke chamber which are pivoted and operated by chains hanging down better than throat dampers?

7 Is it true that a small smoldering fire in one of these large fireplaces is liable to smoke regardless of design?

8 Will a fireplace of the dimension given in this letter create a noticeable draft in the room if a damper is not used?"

"Replying further to your letter of May 21st we shall answer your questions in the order in which you ask them:

1 O. K. as to sizes. Width of back of fireplace should be ⅔ of the width across front opening. Depth of fireplace to be 24″ in this case.

2 Same as above fireplace. Depth of fireplace to be half of heighth of opening but *not* to exceed 24″.

3 No.

4 Width of throat across the front in length and width of flue for depth, this to taper up to the flue opening. Smoke chamber lined.

5 Rule O. K. Area means opening of flue lining.

6 We believe damper better as it prevents drafts from occurring in the room when the fireplace is not being used Throat dampers are the better. Covert Co. have one of their latest, a combination of their previous damper plus the addition of a new handling device which operates by turning a control handle above the opening of the fire place. Simple, does not heat up and is not dirty.

7 Possible.

8 Very probable."

Having gotten into the bad habit of printing in this column some of the swell things our subscribers say about us I suppose we will keep it up for a while (unless they stop saying nice things about us). Anyhow, architect Jos. R. Fallon of Connersville, Indiana, likes Pencil Points and speaks right out in meeting and says so. Here is his letter.

"Editor of Pencil Points:

Your magazine is an inspiration in our office.

It is deserving of all the assistance that the profession can render it.

Very truly yours,
J. R. FALLON,
Architect.

The editor of this department would like to communicate with someone desiring to dispose of copies of Pencil Points for January, February and April 1921 and December, 1923.

and

R. A. Frecht, 30 Bormacord St., Moncton, N. B., wants copies for November, 1921, and June, 1922.

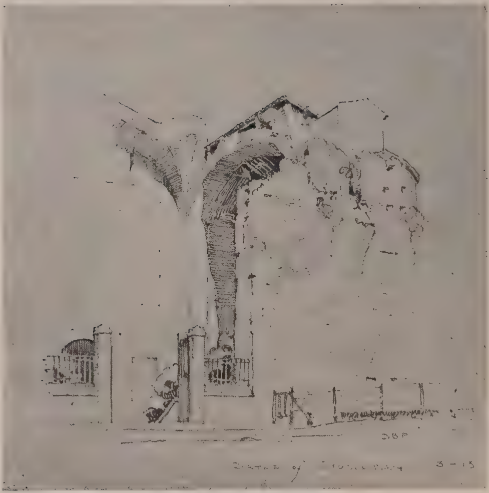
And along comes Mr. George F. Engelbrecht, 218 Fairview Ave., Park Ridge, Ill., who offers for sale Pencil Points complete for 1922 and 1923

and George Nelson, 1457 Melville Place, Chicago, offers Pencil Points complete for 1920, 1921 and 1922.

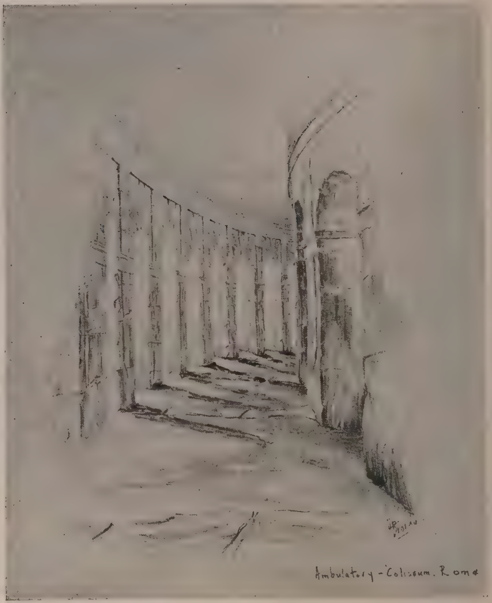
TOUGH proposition deciding who gets the prize for the best June contribution as several of the sketches are excellent (nothing else was any good at all). Mr. John P. Morgan, of Pittsburgh, gets the most votes, for his sketch showing a Florentine bit.

LOOKS like this department was going to be a regular picture gallery pretty soon. Sketches and drawings are coming in at a great rate. Space does not permit us to use all that have come this month but here are the ones that came first—and there are some good ones reserved for August.

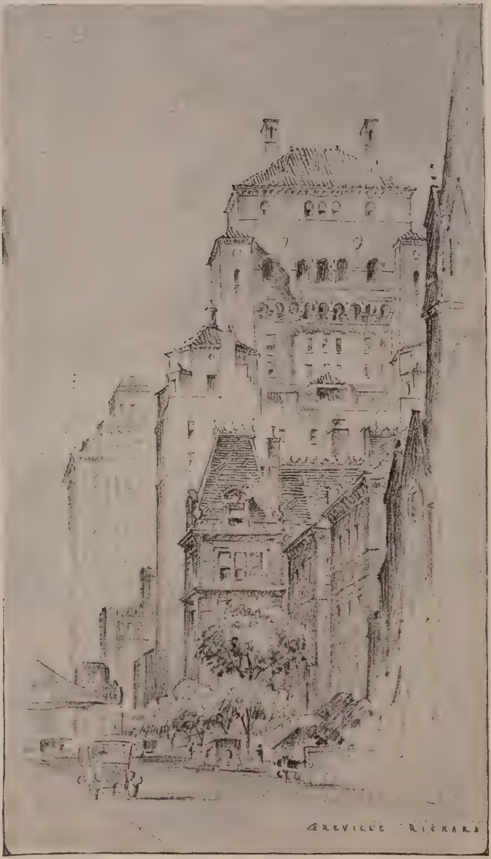
Ye editor now slips quietly away and leaves the rest of the space to the artists.



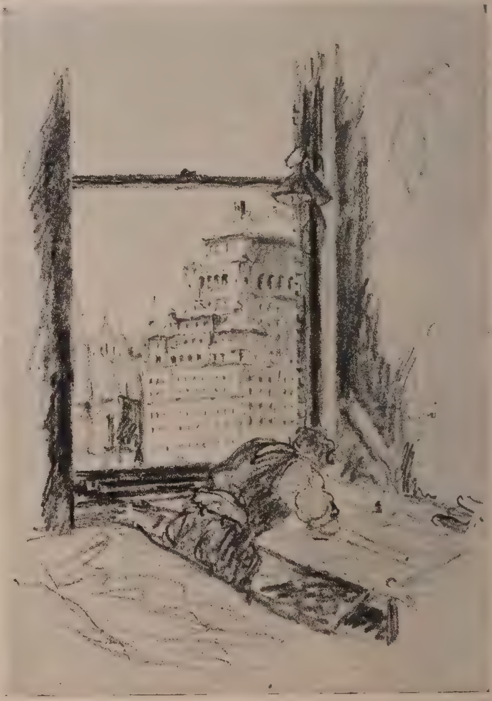
Sketch by Donald B. Parkinson, Los Angeles.
Baths of Diocletian.



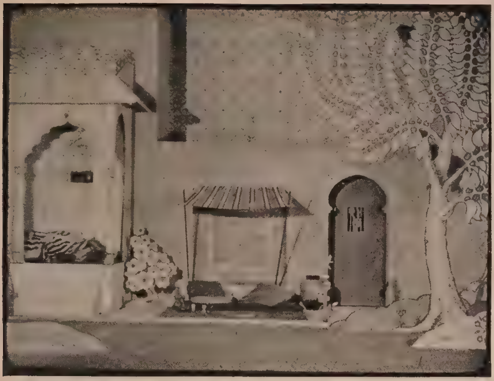
Sketch by Leonard L. Broida
Pittsburgh, Pa. Ambulatory—Colosseum, Rome.



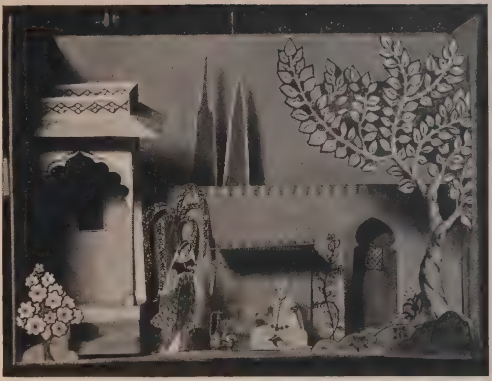
Sketch by Greville Rickard, New York.



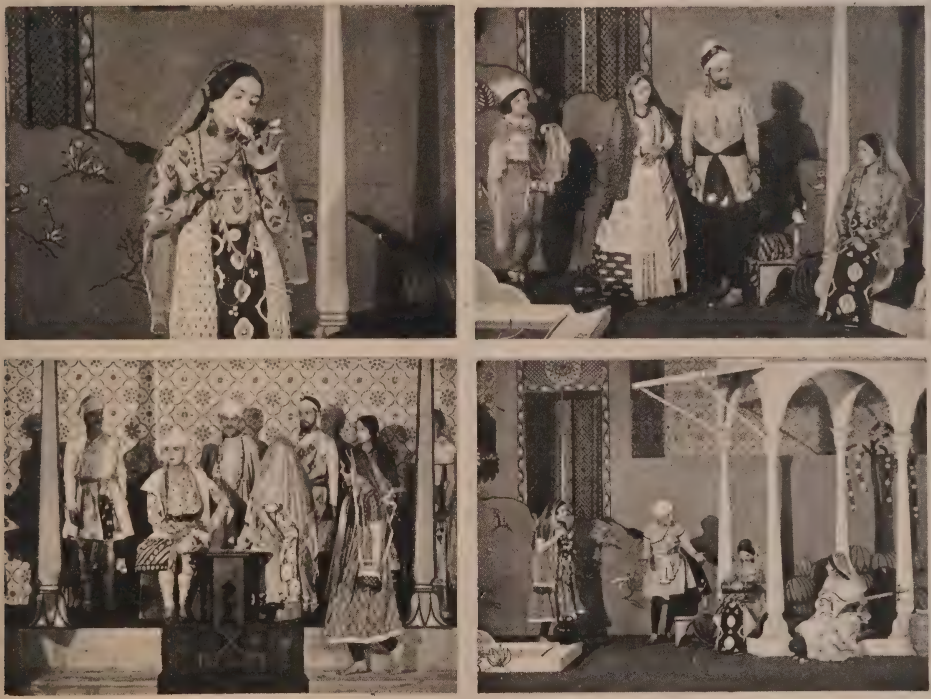
Sketch by Meyer Katzman, from a Window in Geo. B. Post & Sons' Office.



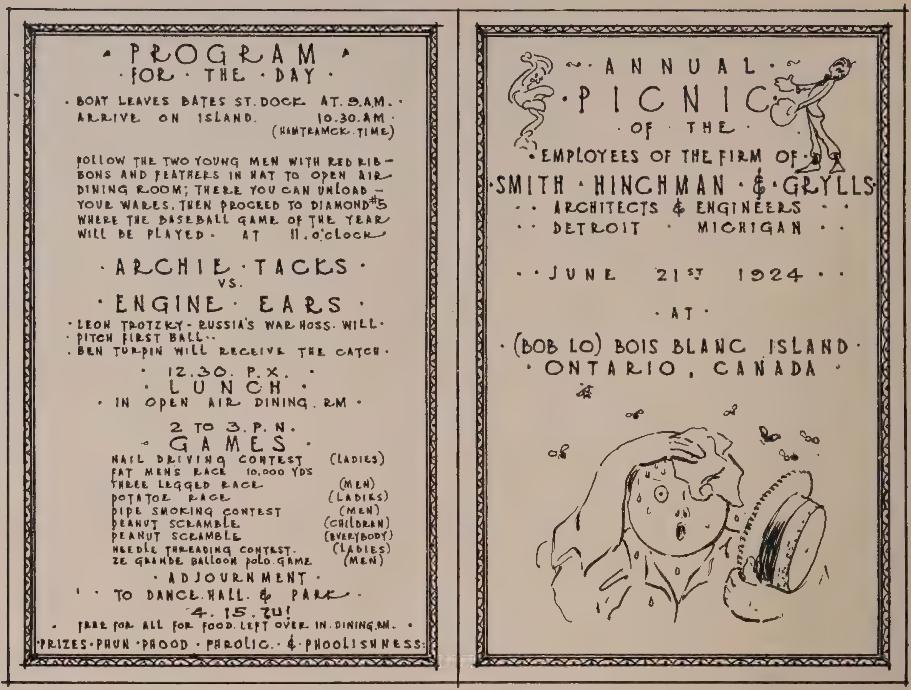
Setting from Film.



Model of Stage Setting.



Scenes from the Play.
Photo-play by Students of Design and Costume Illustration at Pratt Institute.
(Research work at the Metropolitan Museum of Art.)



· PROGRAM ·
· FOR · THE · DAY ·

· BOAT LEAVES BATES ST. DOCK AT. 9.A.M. ·
ARRIVE ON ISLAND. 10.30. AM ·
(HAMTRAMCK. TIME)

FOLLOW THE TWO YOUNG MEN WITH RED RIBBONS AND FEATHERS IN HAT TO OPEN AIR DINING ROOM; THERE YOU CAN UNLOAD — YOUR WARES. THEN PROCEED TO DIAMOND #5 WHERE THE BASEBALL GAME OF THE YEAR WILL BE PLAYED · AT 11. o'clock

· ARCHIE · TACKS ·
VS.
· ENGINE · EARS ·

· LEON TROTZKY - RUSSIA'S WAR HOSS · WILL ·
· PITCH FIRST BALL · ·
· BEN TURPIN WILL RECEIVE THE CATCH ·

· 12.30. P. X. ·
· LUNCH ·
· IN OPEN AIR DINING. RM ·

2 TO 3. P. N.
· GAMES ·

NAIL DRIVING CONTEST	(LADIES)
FAT MEN'S RACE 10,000 YD'S	
THREE LEGGED RACE	(MEN)
POTATOE RACE	(LADIES)
PIPE SMOKING CONTEST	(MEN)
PEANUT SCRAMBLE	(CHILDREN)
PEANUT SCRAMBLE	(EVERYBODY)
NEEDLE THREADING CONTEST.	(LADIES)
ZE GRANDE BALLOON POLO. GAME	(MEN)

· ADJOURNMENT ·
· · TO DANCE. HALL. & PARK ·
4. 15. ZU!
· FREE FOR ALL FOR FOOD. LEFT OVER IN. DINING. RM. ·
· PRIZES · PHUN · PHOOD · PHROLIC. · & · PHOOLISHNESS:

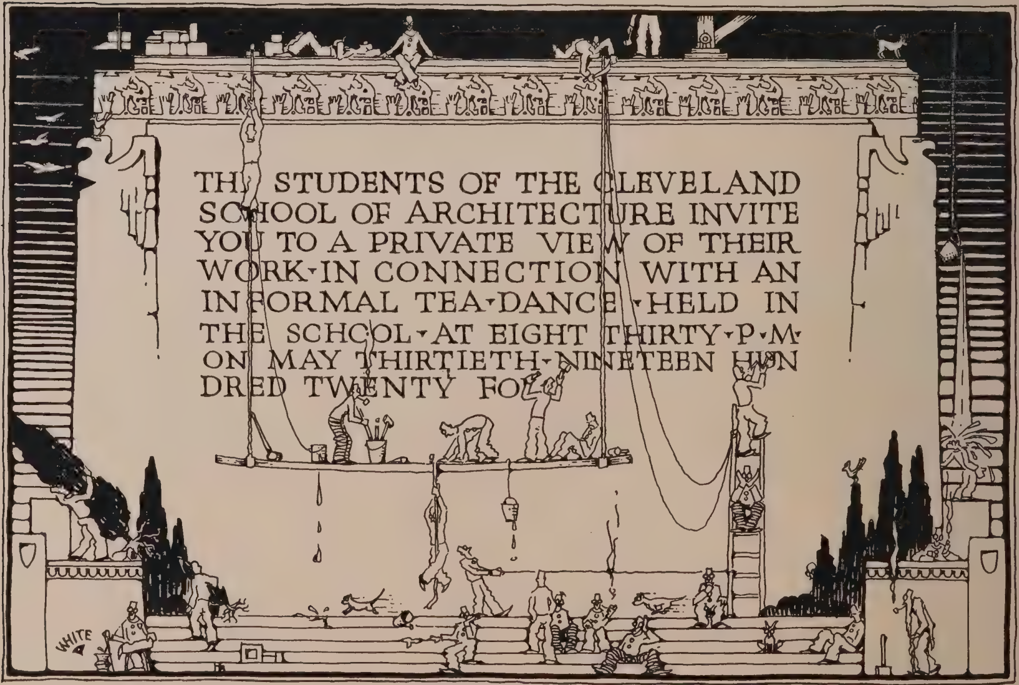
· ANNUAL ·
· PICNIC ·
· OF · THE ·
· EMPLOYEES OF THE FIRM OF ·
· SMITH · HINCHMAN · & · GRYLLS ·
· · ARCHITECTS & ENGINEERS · ·
· · DETROIT · MICHIGAN · ·

· · JUNE 21ST 1924 · ·

· AT ·

· (BOB LO) BOIS BLANC ISLAND ·
· ONTARIO, CANADA ·

Program for Picnic of Office of Smith, Hinchman & Grylls.



THE STUDENTS OF THE CLEVELAND SCHOOL OF ARCHITECTURE INVITE YOU TO A PRIVATE VIEW OF THEIR WORK · IN CONNECTION WITH AN INFORMAL TEA · DANCE · HELD IN THE SCHOOL · AT EIGHT THIRTY · P · M · ON MAY THIRTIETH · NINETEEN HUNDRED TWENTY FO

Invitation Issued by the Students of the Cleveland School of Architecture.

THE SPECIFICATION DESK

A Department for Specification Writers

MISCELLANEOUS ITEMS OF CONSTRUCTION
PART XX

By Otto Gaertner

In this series of notes Mr. Otto Gaertner, A.I.A., Associate Member American Society of Civil Engineers, is treating of a number of the minor matters of construction that are troublesome unless the architect happens to have met a similar problem previously—matters of a more or less special nature.—Ed.

Garages (*Continued*)—In the larger cities the building codes have minimum requirements which make the construction of the various garage buildings similar so that there is not so much variation in the insurance rates. It would be well to take note of some of the differences in rates in the suburbs where there is more leniency in construction and consequently more variation. When the base rate is one dollar and twenty-five cents per hundred dollars, fifty cents per hundred must be added if there is no public fire protection. Walls of brick, stone, hollow tile and solid or reinforced concrete if only one story high must be of the thicknesses prescribed by the National Board standards and if they are made less in thickness, two cents per hundred must be added for each four inches deficiency in the thickness. If the walls are more than one story high five cents per hundred must be added for each additional story.

Where garages adjoin other buildings they should be provided with standard parapet side walls and in case of the absence of the parapet walls a charge of one cent per hundred dollars is made in addition to the base rate. Charges may be added or omitted in various cases according to the conditions to be met with adjoining buildings. A parapet may not be much protection if there is a frame or other building adjoining the garage which is ten feet or more higher than the garage building. If the garage walls are frame an additional charge of fifty cents may be made, when the area of the building is over twenty-five hundred square feet, but the area is less than twenty-five hundred square feet, a charge of only twenty-five cents may be made. In a case like this the architect can readily subdivide a large area into several areas under twenty-five hundred square feet by fire walls and automatic self-closing fire doors in order to take advantage of the lower rate.

If the walls of the building are only partly of frame construction, a charge of such percentage of the fifty cent additional charge for frame walls is made as the frame portion of the building bears to the whole. Terra cotta block walls are treated the same as brick walls except that the exceptionally bad features therein are charged for. Concrete blocks, on account of the uncertain qualities of some of them and on account of the danger of the aggregates in some of them exploding from the heat are not so well thought of. No additional charge for concrete block walls is made for buildings of one story and the walls are treated the same as brick walls and the same charges are made for deficiencies in wall thicknesses. But for concrete block walls of two-story buildings, one-half of the charge mentioned for frame walls is made, and if the walls are higher than two stories the same charge is made as for frame walls.

If the ground area of a garage building is not over five thousand square feet in area there is no charge in addition to the base rate, but if the area is more, there is a charge of ten cents for each additional five thousand square feet charged pro rata. When the ground area is less than five thousand square feet a deduction may be made of five cents for each one thousand square feet less than the five thousand but the deduction shall not be greater than fifteen cents. In brick buildings ten per cent is allowed for each brick division wall with a maximum allowance of fifty per cent but no allowance is made where the total unobstructed area is sufficient for the charge to be applied. Of course any openings occurring in the brick division walls must be provided with approved automatic self-closing fire doors.

The architect is often careless regarding the skylight construction. When the skylights are not made in the standard way required by the insurance rating departments, a charge of five cents is added to the base rate. Skylights over the building, except over shafts should be of approved wire glass one-quarter inch thick in metal frames or of one-half inch thick ribbed glass in metal frames. It must be remembered, however, that municipal building code requirements must be followed in preference to those made by insurance bodies. Sometimes one will permit wired glass but not the other, et cetera. The insurance rating bureaus also have varying requirements in regard to some items but agree on others. The items mentioned herein seem to be customary. Another skylight condition requested is to have the monitor skylights made with metal frames with the side and top lights of wired glass except again where they occur over fireproof shafts. In order to permit the easy destruction of the glass by firemen in case of fire, the wired glass is objected to. Therefore, over shafts enclosed in non-combustible materials and with openings to floors protected by the standard fireproof construction for doors and windows, skylights are required to have thin glass, usually one-quarter of an inch thick, set in metal frames with a number twelve gauge wire screen of one inch square mesh supported on metal supports placed six inches above the skylight, the screen extending six inches beyond the skylight. If the skylight occurs over a non-fireproof shaft it should be made with one-quarter inch thick wire glass set in metal frame and the screen may be dispensed with.

Roofing material should be of five-ply paper or felt with a slag or gravel finish or of metal. For a shingle roof a charge of ten cents is added to the base rate which is based upon the five-ply and the metal roofs. If the shingle roof is greatly exposed to other buildings, an additional charge of as much as twenty cents and sometimes more is made. For roof coverings of other materials charges are made in accordance with the fire resisting qualities of the materials. A mansard or monitor roof calls for an extra charge but this charge is not added in addition to the charge already made for shingles, nor does it apply to frame buildings.

Cornices should be of brick, stone or all metal in order to be rated under the base rate. There should be no exposed woodwork except on frame buildings. Sometimes the architect designs a masonry building but for economy he finishes it with a metal or wood cornice. If the metal cornice has wood backing two cents is added to the base rate. If it is an open wood cornice the additional charge is three cents, and if it is a boxed cornice the charge is five cents. Wooden awnings, bay windows, and other wooden features are charged for at not less than five cents. If such features occur on the same side of the building as a wood cornice the highest charge prevails but not both. Enclosed porches or show windows, etc., are considered as frame additions and charged for accordingly.

Floors should be of cement or other fireproof masonry but if they are of wood in the garage or repair shop portion of the building, they would be charged for according to conditions, up to twenty-five cents. The hazard is very great where the floors are saturated with oil and gasoline. In other portions of the garage buildings offices and similar spaces excepted, the floors if not cement may be double wood floors or two inch thick single floors and a charge of five cents will be made. There would be no extra charge for wood office floors.

(*To Be Continued*)

PUBLICATIONS OF INTEREST TO THE SPECIFICATION WRITER.

Any publication mentioned under this heading will be sent free, unless otherwise noted, upon rqeuest, to readers of Pencil Points *by the firm issuing the publication. When writing for any of these items please mention* Pencil Points.

Ambler Asbestos Shingles.—Profusely illustrated handbook covering the subject. Photographs and drawings. Color plate. 60 pp. 6 x 9. Asbestos Shingle Slate & Sheathing Co., Ambler, Pa.

Published by the same firm. Ambler Asbestos Building Lumber. Catalog A.B.L. Useful data on Asbestos Lumber, a material of wide adaptability in building construction. 36 pp. 8½ x 11. Ambler Asbestos Corrugated Roofing. Engineers' data sheet. Full of detail drawings and practical helps. 40 pp. 8½ x 11.

Humphrey Service Manual.—Attractive booklet covering subject of gas water heating and heaters, illustrated in colors. Cross section, tables, layouts, diagrams and complete specification data. 32 pp. 8 x 11. Humphrey Co., Kalamazoo, Michigan.

Economies in Building with Iron that Lasts.—Booklet for architects, engineers and others interested in better building materials. List of products made of Armco Iron. 8½ x 11. American Rolling Mill Co., Dept. F, Middletown, Ohio.

Published by the same firm. The Story of Commercially Pure Iron. Treatise on rust-corrosion in relation to building. Much information for the architect and specification writer. 50 pp. 8x12.

Roofing Specifications.—Forms covering extra heavy built-up roof and standard built-up roof. Flashings, materials, and application are considered. Drawings showing actual construction. Bird & Son, Inc., East Walpole, Mass.

Chimney Pieces.—Portfolio of photographic reproductions of fireplaces and mantels in all styles and periods with plans and measurements. A valuable addition to the files of every architect and designer. Jacobson Mantel & Ornament Co., 322 East 44th St., New York City.

Decorative Linoleum Floors.—Large folio in colors showing original designs for all the rooms in the modern residence, with especial reference to the treatment of floors, color harmonies and decorative effects. 14 color plates with descriptive text. 11 x 15. Armstrong Cork Co., Lancaster, Pa.

Style in Roofs.—Brochure with many color plates on the subject of roof beauty. Original designs of many small houses of various styles. 24 pp. 8 x 11. The Beaver Products Co., Buffalo, N. Y.

Natco Standard Fireproofing, Bulletin No. 171.—14th edition just off the press covering in drawings and text the subject of modern fire proof construction. Much engineering data, specifications, construction drawings, etc. 36 pp. 8½ x 11. National Fire Proofing Co., Fulton Bldg., Pittsburgh, Pa.

MacArthur Piles.—Detail sheet showing composite type (wood and concrete). Drawings and other information. 8½ x 11. MacArthur Concrete Pile & Foundation Co., 55 John St., New York City.

Healthful, Helpful Hints.—Booklet on the subject of heating with especial reference to the small house. 16 pp. 4½ x 9. The Farquhar Furnace Co., Wilmington, Ohio.

The Milcor Manual.—Data book No. 20. Covers materials and methods of fireproof construction. Many drawings. Typical details applicable to a wide variety of buildings. 64 pp. 8½ x 11. Milwaukee Corrugating Co., Milwaukee, Wis.

Published by the same firm. Metallic Construction for the Modern Home. Booklet showing application of Milcor products to the modern residence. Color plates and much useful data. 20 pp. 8½ x 11.

Electrical Wiring Devices.—Catalog R. Complete catalog bound in cloth illustrating and describing full line of sockets, switches and other wiring devices. Much useful data for the specification writer. 150 pp. 8½ x 11. The Hart & Hegeman Mfg. Co., 342 Capitol Ave., Dept. 7, Hartford, Conn.

Rockwood.—Booklet on the subject of Gypsum lumber, a material of wide use in modern building construction. Sectional drawings showing approved methods. 16 pp. 8½ x 11. Rockwood Corporation of America, Times Building, St. Louis, Mo.

Elevator Door Efficiency.—Illustrated catalog showing various types of elevator doors, detail drawings, specifications, safety appliances, etc. 8 x 10¾. 48 pp. The Peelle Co., Stewart Ave. & Harrison Place, Brooklyn, N. Y.

Architectural Specifications.—Complete specifications on exterior and interior finish coating, structural coatings, cement coatings, shingle stains, floor and wall finishes, enamels, varnishes, etc. 32 pp. 8½ x 11. The Glidden Co., Cleveland, Ohio.

Sheet Metal Building Specialties.—Catalog showing complete line of range boilers, pantry sinks, drain boards, gasoline storage tanks, etc. 32 pp. 5½ x 8½. John Trageser Steam Copper Works, 447 West 26th St., New York City.

Water Mixing Valves.—Illustrated handbook showing thermostatic water mixing valves for showers and a variety of other uses. Diagrams and complete specification data. 32 pp. 7½ x 10½. Leonard-Rooke Co., Providence, R. I.

Air Conditioning Apparatus.—Loose-leaf bulletins Nos. 50 and 120 describing air washers for all types of service, together with complete specification information. 100 pp. 6 x 9. Atmospheric Air Conditioning Corporation, Lafayette Bldg., Philadelphia, Pa.

Norton Floors.—Loose-leaf specification portfolio covering Alundum stair tile, floor tile and ceramic mosaic tile. Full size sectional drawings and much other useful information for the drafting room. 27 pp. 8½ x 11. Norton Co., Worcester, Mass.

Genasco-Latite Shingles.—Booklet profusely illustrated with color plates with details and other data. 24 pp. 6 x 9. The Barber Asphalt Co., Philadelphia, Pa.

Metal Protection.—Technical booklet on subject of rust resisting coatings. Coatings Specialties Corp., 299 Madison Ave., New York City.

Walls and Ceilings.—New illustrated booklet on wall and ceiling construction. 12 pp. 8½ x 11. Truscon Steel Co., Youngstown, Ohio.

Cypress Pocket Library.—Volume 28, trellises and arbors and pergola-garage containing 23 original designs. 88 pp. Volume 35, sun parlors, balconies, etc. 48 pp. Volume 44, authentic Colonial Homes. 192 pp, with many detail drawings. Southern Cypress Mfrs. Assn., New Orleans, La.

Up-to-Date Electrical Specialties.—Catalog No. 6. Handy pocket size in flexible leatherette binding. Illustrations, tabular matter, 285 pp. The Connecticut Electric Mfg. Co., Bridgeport, Conn.

Quick Meal Gas Appliances.—Catalog 133 shows complete line of modern ranges and other equipment for the dainty kitchen. 68 pp. 6 x 9. Quick Meal Stove Co., 825 Chouteau Ave., St. Louis, Mo.

Mechanical Rubber Goods for the Building Trades.—Treatise illustrated in color covering tile flooring, rubber mats for vestibules, fire hose and other specialties. 24 pp. 6 x 9. U. S. Rubber Co., 57th Street and Broadway, New York City.

Metal Weatherstrips.—Catalog illustrated with detail drawings showing application of metal weatherstrips to various types of windows and doors. 24 pp. 6x9. Niagara Metal Weatherstrip Co., Buffalo, N. Y.

The Woodbury Granites.—Brochure showing monuments and mausoleums built of granite. Many attractive designs. 24 pp. 6x8. Woodbury Granite Co., Hardwick Vt.

Published by the same firm. Brochure illustrating a large number of buildings of various types designed for and built of granite. 60 pp. 6 x 8.

The Royal Line.—Loose-leaf portfolio showing smokeless boilers, sectional boilers, round steam boilers and hot water supply boilers, together with complete technical and engineering data. Hart & Crouse Co., Utica, N. Y.

Published by the same firm Royal Furnaces, booklet covering hot air furnaces for all uses.

Worthington Bulletin A-3.—Shows complete line of pumps of various types suitable for use in buildings. Complete technical information for the specification writer. 60 pp. 6x9. Worthington Pump & Machinery Corpn., 115 Broadway, New York City.

Architects and Engineers Catalog No. 795.—Covers valves of various types for use in buildings. The Fairbanks Co. 416 Broome St., New York City.

Getting The People In.—Booklet showing 18 designs for store fronts, together with other information on store front construction. 68 pp. 6x9. Zouri Drawn Metals Co., East End Ave., Chicago Heights, Ill.

Practical Color Combinations.—A color guide showing combinations of Mellotone Flat Colors. The Lowe Bros. Co., 450 East 3rd St., Dayton Ohio.

Novelty Boilers.—Booklet 77-A covering complete line of heating specialties, etc. Valuable data for the specification man. 32 pp. Abram Cox Stove Co., American and Dauphin Sts., Philadelphia, Pa.

Steel Racks and Shelving.—Catalog 'O' shows complete line of this equipment for industrial and other buildings. Profusely illustrated. 36 pp. 6x9. Durand Steel Locker Co., 75 W. Monroe St., Chicago, Ill.

Published by the same firm. Catalog 'M' Steel Lockers for all uses. Specifications, 36 pp. 6 x 9.

School Furniture.—Catalog No. 55 covers full line of seating, desks and other equipment required in the modern school. 104 pp. 6x9. American Seating Co., 14 East Jackson Plvd., Chicago, Ill.

Crow Products.—Bulletin No. 11. Preservative paints for a variety of uses. Technical data. 12 pp. 8½ x 11. Crow Chemical Co., 35 Warren St., New York City.

Skylight Details and Specifications.—Portfolio containing detail drawings showing various types of skylight construction. Complete specification data. 8½ x 11. American 3-Way Luxfer Prism Co., 1305 South 55th Court, Cicero, Ill.

Window Glass Specifications.—Document prepared in co-operation with the U. S. Bureau of Standards. Grades and qualities of glass. Definitions of terms used. 8½ x 11. American Window Glass Co., Farmers Bank Bldg., Pittsburgh, Pa.

Steel Equipment for Kitchens and Bathrooms.—Catalog No. 10 showing steel kitchens, kitchen cabinets, wall cabinets, broom and ironing-board compartments, etc. Detail drawings and specifications. 12 pp. 8 x 11. Majestic Steel Cabinet Co., 4223 Belleplaine Ave., Chicago, Ill.

Double Hung Hollow Metal Windows.—Full size detail sheet 24 x 30 showing construction in plan and section with complete specifications. Willis Mfg. Co., Galesburg, Ill.

Flooring Specifications.—Document covering T-M-B flooring suitable for use in a wide variety of buildings. 4 pp. 8½ x 11. Thomas Moulding Brick Co., 133 W. Washington St., Chicago, Ill.

Making Every Minute Count.—Automatic Time Systems for factories, hotels, office buildings, hospitals and schools. Complete data. 16 pp. 8½ x 11. Standard Electric Time Co., Springfield, Mass.

How to Order Brass.—Illustrated booklet with much technical data on the properties of brass in various forms and for various uses. Interesting sidelights on the processes of manufacture. 40 pp. 6 x 9. Chase Metal Works, Waterbury, Conn.

Architects' Handbook.—Illustrated with blue prints showing methods for using and installing Sani Onyx in bathrooms, and for many other uses. Specifications. 36 pp. Marietta Mfg. Co., Indianapolis, Ind.

Packless Radiator Valves.—Booklet showing construction of the Dole Valve. Roughing-in dimensions and other useful data. 36 pp. The Dole Valve Co., 1923 Carroll Ave., Chicago, Ill.

The Preservation of Wood.—Treatise on this interesting and important subject. 50 pp. The Rodd Co., Century Bldg., Pittsburgh, Pa.

Color Harmony in Floors.—Brochure illustrated in color reproducing samples of various woods so as to show grain, color and texture. 24 pp. Maple Flooring Mfrs. Assn., Stock Exchange Bldg., Chicago, Ill.

Permanent Furniture.—Brochure showing china cabinets, book cases, mantels, sideboards and other items of furniture permanently built in to the house. 50 pp. Curtis Companies Service Bureau, Clinton, Iowa.

The Book of Service.—Portfolio containing information on a complete line of paints, shingles, finishes, wall board, shingle stains and roofings. The National Roofing Co., Tonawanda, N. Y.

Jenkins Valves.—Handbook No. 21 for the architect, specification writer and engineer. Shows valves and fittings for general use in building construction. 270 pp. Convenient pocket size. Bound in cloth. Jenkins Bros. 80 White St., New York.

Diamond-D Switches.—Catalog "F" illustrates and describes complete line of electrical appliances made by Hart Mfg. Co., Hartford, Conn.

New Process Gas Ranges.—Catalog 148 shows complete line of modern ranges suitable for residences, clubs, hotels, etc. 110 pp. 8 x 11. New Process Stove Co., 4301 Perkins Ave., Cleveland, Ohio.

Beautiful Birch for Beautiful Woodwork.—Brochure showing the possibilities of this wood. Northern Hemlock and Hardware Mfrs. Assn., Oshkosh, Wis.

Atlantic Terra Cotta.— Monthly magazine for architects and draftsmen, volume 6, No. 12 shows plates of old Mexico, together with two pages of details of construction. Atlantic Terra Cotta Co., 350 Madison Ave., New York City.

Distinctive Houses of Indiana Limestone.—Volume 12, series B. Illustrated brochure showing wide range of residences designed by many architects interpreted in limestone. 50 pp. 8½ x 11. Indiana Limestone Quarrymen's Assn., Box 784, Bedford, Indiana.

Historic Mahogany.—Brochure showing many beautiful designs of pieces of furniture done in Mahogany, Chippendale, Hepplewhite, Sheraton, and the Mahogany of Colonial Days in America are shown. Mahogany Association, 1133 Broadway, New York City.

Oil Cook Stoves.—Catalog No. 204 describes the Lorain high speed oil burner in various combinations. 40 pp. 7 x 10. Dangler Stove Co., Cleveland, Ohio.

Universal Safety Treads.—Catalog illustrated with drawings, sections and complete information for installation. 16 pp. 8½ x 11. Universal Safety Tread Co., 40 Court St., Boston, Mass.

Rivet-Grip Steel Joists.—Bulletin with drawings showing floor construction, tables of safe loads, other useful data. Specifications. The Rivet-Grip Steel Co., 2735 Prospect Ave., Cleveland, Ohio.

Power Plant Equipment.—Catalog showing steam traps, steam and oil separators, feed water heaters and a variety of other specialties applicable under many conditions. Technical data, diagrams, etc. 56 pp. 8½ x 11. The Swartwout Co., Cleveland, Ohio.

The Gospel of Fresh Air.—8th Edition. Covers subject of ventilation and ventilators for all types of buildings. Much specification information and technical data. 36 pp. 8½ x 11. The Swartwout Co., Cleveland, Ohio.

Artists' Papers.—Attractive brochure containing samples of papers suitable for sketching and all types of drawings in all mediums. White and colors. Canson & Montgolfier, 461 8th Ave., New York City.

York Vaults—A.I.A. File No. 18-B, Specification No. 423 covering storage vault doors suitable for a variety of uses. Detail drawing, 8½ x 11. York Safe & Lock Co., 55 Maiden Lane, N. Y. C.

Enameled Brick Data Sheet.—Condensed information with eight detail drawings showing special shapes, construction drawings, etc. 8½ x 11. American Enameled Brick & Tile Co., 52 Vanderbilt Ave., N. Y. C.

The Rivet-Grip System of Bank Vault Reinforcement.—Handbook on the design and construction of modern bank vaults, construction drawings, details of door connections, much useful information, including specifications. 34 pp. 8½ x 11. The Rivet-Grip Steel Co., 3735 Prospect Ave., Cleveland, Ohio.

Knife Switches and Accessories.—Catalog No. 25 showing this line completely. 32 pp. 8 x 11. Frank Adam Electric Co., St. Louis, Mo.

MASTER DRAFTSMEN—HARVEY ELLIS.

(*Continued from page* 55)

without the least suggestion of hurry, smoking cigarettes incessantly—lighting one from another—and carrying on a lively argument or continuous line of epigrammatic comment. He seemed to make no rough sketches or studies. Each sketch was a finished piece of work and I doubt that such a thing as a slovenly drawing was ever made by him. Usually the last touch to his drawing was his signature, of which he seemed to make a special study—the only thing upon which he used an eraser, and there he used it several times, altering the location and then returning again to the first. On one occasion he signed a clean sheet of paper before starting the drawing and commented, "There! I have the worst of it done." In making his decorative pictures he first made a finished cartoon in charcoal, transferred the outlines to paper and inked them in with a brown line. He seemed to regard a pan of water color as something to be dissolved in a cup of water and spread without mixing. He would put in his triad of primary or secondary colors in an arrangement, then go over it with a sponge and greying tones—in the manner that a stained glass worker puts in his base colors and then plates them.

During the years he spent at Minneapolis, St. Joseph and St. Louis and after his return east, when he lived at Rochester and Syracuse, he produced many beautiful drawings, large and small—perspectives, working drawings, ornamental details—figures, animals and landscapes, but as far as I recall only a few buildings. He worked on a principle that paraphrased a common expression about golf: if drawing interfered with his business as an architect he gave up the business. His love of pictorial drawing kept him occupied to an extent that prevented much seeking after architectural business. Although many buildings exist in Minnesota, Missouri and western New York, that were executed from his designs, nearly all were made for other architects and in the sense that "to the business house belongs the credit," are their work. He produced a few good oil paintings, many excellent water colors and dozens of the most notable of pen drawings. Yet I doubt that any of these has found its proper place in a public art gallery. He is remembered mainly by architects and draftsmen for the great number of reproductions of his distinguished drawings which appeared in the architectural magazines and exhibition catalogues of three or four decades ago.

FRANCIS. S. SWALES.

IN YOUR June issue there is an article by E. G. Parker '24 Department of Architecture, Clemson A. & M. College, Clemson College, S. C. Here is one solution to the problem.

I have undertaken to go through the University of California on a half time basis. One half day in an office and one half day in school.

I find that while it takes a year or two longer it works very well in procuring an education which otherwise would be impossible. I not only learn the practical side of architecture but also the academic part.

I make a small sketch every day to improve on freehand drawing and also a sketch of some practical detail of construction. As Coué has it every day in every way I get better and better.

When the time arrives for working all day and college is finished I expect to be of such assistance to an architect by making details of construction that he will not feel that he is doing charity work in paying me a small salary to begin with.

The average architect starts a student on his staff by having him make small details so if a student did just one sketch of a detail of construction each day of his college career he would be able to earn something at the end of four years.

A Reader of PENCIL POINTS.

A Free Employment Service for Readers of Pencil Points

Advertisements covering "draftsmen wanted" and "positions wanted" will be printed in this column free of charge. Such advertisements will be printed in one issue only and limited to thirty-five words. On subsequent insertions of the same advertisement a charge of 5 cents a word will be made.

Architects requiring the services of draftsmen, and draftsmen desiring positions, are invited to communicate with this office stating full particulars as to position, qualifications, salary, etc. In addition to printing these wants in Pencil Points they will be posted on The Bulletin Board in our office.

Draftsmen in New York and vicinity desiring positions are invited to call and inspect The Bulletin Board and also post notices offering their services.

Information regarding positions will be forwarded, on request, to draftsmen and architects residing in other cities.

In undertaking this service we accept no responsibility other than transmitting the information in the manner above stated. There is no charge for this service.

To avoid confusion we request immediate notification when the position is filled or obtained.

THE PENCIL POINTS PRESS, INC.,
Phone Madison Square 5940, Dept. E. 19 East 24th St., New York

Wanted: Architectural draftsman, experienced, good on lettering, details, etc. Steady job and good pay for the right party. Apply in person. A. L. Veglinante, 40 Passaic Street, Garfield, N. J.

Wanted: Two first class senior draftsmen, one for general work and another accustomed to Church work in Gothic design; both capable of preparing general working drawings, large scale and full size details from sketches prepared by the head designer. State age, experience and training, references, married or single, and salary desired, in first letter. Ritcher & Eiler, architects, 147 N. 5th St., Reading, Pa.

Wanted At Once—First class architectural draftsman familiar with high grade work. Must be neat, accurate and industrious. Permanent position for right man. Submit specimens of work with application. H. H. Turner & V. E. Thebaud, architects, Grand Rapids, Mich.

Wanted: Architectural draftsman for permanent position. Must be capable of making working drawings and details and general drafting. Good chance for advancement. Malcolm B. Harding, architect, Columbus Building, Westfield, Mass.

Wanted: Experienced architectural superintendent to act as clerk of works on the construction of an office building. Box No. 1267-M., care of Pencil Points.

Architect, 25 years' all around practical experience in all phases of design and construction of best types of building, and in own practice, scholarly training and travel, excellent designer. Rendering in all mediums. A real executive registered in New York and California, desires permanent connection with architect in New York or vicinity that can use the services of a trained intelligent and dependable man to assist with the details of administration. Salary commensurate with services. Box 320-L, care of Pencil Points.

Draftsman, specification writer, superintendent, architectural engineer, open for engagements. Twenty-five years' practical experience in all lines connected with architects' offices. Would prefer a medium or small office, doing high class work in West, middle West, or South, where services of a capable man could be utilized with a reasonable degree of permanence. Fair in color work. A-1 references. Details upon inquiry. Box D. C. J., care of Pencil Points.

Position Wanted as Superintendent of Construction. Three years' practical experience with Eastern contractor. Completes architectural course at Western University this June. Would locate anywhere. Salary incidental. Box 009, Care Pencil Points.

Experienced Architect, age 48, experienced on apartment buildings, commercial buildings, schools, churches and residences; specification writer, estimator superintendent, now located in middle West wishes position. Best of character and references. Box 0043, care of Pencil Points.

Architects, Paris diplomé—all around and well experienced designer open to engagement for position with responsibility. Smaller New York architect's or decorator's office preferred. Full or part time. V. H., care of Pencil Points.

Position Wanted: Beaux-Arts Institute student wishes position in Philadelphia as junior draftsman. Five years' office experience on schools, residences, churches, apartment buildings and other varied types of buildings. Can make complete working drawings and details from sketches and write specifications. Best references. Salary $30. Box 0817, care of Pencil Points.

Architectural Draftsman—15 years' general architectural and engineering experience desires employment with established architect in Pennsylvania or New Jersey, with possibility of partnership. Salary to be arranged. Box 03249, care of Pencil Points.

Architect, F.R.I.B.A. wishes to take suitable position with established firm, either in New York or elsewhere, with a view of becoming a partner in the firm. Box A. R. H., care of Pencil Points.

Experienced Man just having concluded engagement with corporation building and financing residences, is open for engagement. Good draftsman and designer, specializing in well planned homes. Can make snappy sketches to show clients. Thorough knowledge of construction and superintendence. Competent to carry whole thing through from sketch to completed home. Best references. Box 014-B, care of Pencil Points.

Architectural Draftsman, married, having 8 years' of practical experience on apartment houses and general work, desires position. Salary to be agreed upon. References furnished upon request. Box No. 0088, care of Pencil Points.

Architect, experienced and capable of producing working plans from preliminary sketches desires correspondence with architects who can offer spare time work. Experienced residential and business buildings. Box 0574, care of Pencil Points.

Young Man, 26 years old, wishes position as architectural draftsman. Graduate of Illinois University. Four years' experience as carpenter. Would like position in a city of not over 70,000 population. Salary $40 per week. C. L. M., care of Pencil Points.

Young Man, 17, would like position in New York City office as office boy, file clerk or tracer. Can trace any architectural drawing. Y. Sterner, 80 Greyrock Place, Stamford, Conn.

Wanted: Position with architect located in New England or New York State. Young man, 35 years old, 10 years' experience as practical carpenter, 5 years in drafting office in Canada, would like to locate permanently in U. S. Understands full size details and some designing. Would accept position to get ahead. Salary $30 per week. Frank Serton, 46 Rutland Square, Boston, Mass.

Position Wanted by high school graduate, 18 years old Have had one year of practical experience on small residential work. Would like to become connected with firm in or around New York specializing in hotel or apartment house work. Anxious to learn. Good tracer. Box WS, care of Pencil Points.

Position Wanted with New York City architect as junior draftsman. Just completed 3 years at Mechanics Institute. C. W. Josephson, 540 E. 142nd St., N. Y .C.

Junior draftsman, Pratt Institute schooling, one year's experience, wishes position in architect's office. Alfred C. Shaknis, 541 Grant Ave., Brooklyn, N. Y.

Young Man wishes position in New York City where he can do Beaux Arts work. Four years at University of Minnesota. For ten months has done all the designing and drafting for the largest structural granite company in Minnesota. Box O. F. care of Pencil Points.

Position Wanted: Young man, 18 years old, High School graduate, attends C. C. N. Y. evenings, can do tracing, department work, etc. Has experience. Harry Halbreich, 381 Powell St., Brooklyn, N. Y.

Junior Draftsman desires position. Three years Cooper Union and one year practical experience. 0613, care of Pencil Points.

(*Other Items on Pages* 96 *and* 63)

PENCIL POINTS
VOLUME V AUGUST 1924 NUMBER 8

SELLING ARCHITECTURE

THAT many architects throughout the country are of necessity working for an inadequate commission and consequently feel unable to do as good work as they are capable of and are actually unable to pay their draftsmen as well as they would like to pay them are facts that are recognized. In many communities the standard of payment for an architect's services is so low as to be utterly discouraging.

There is no use in mulling over this fact. The thing to do is to look around for a cure. If we try to get down to the root of the trouble it looks as though the whole thing grows out of a lack of appreciation of the value of an architect's services on the part of the public of the communities in which an inadequate commission is the rule.

Assuming that we have put our finger on the cause, what can we do about it? Of course, much can be done through articles in the local papers to give the public a better knowledge of the services an architect sells. But that is indirect and slow. It should be done by all means. However, isn't there something else to do that is more direct? Yes, in our opinion there is—make each job an advertisement, by showing the client an object lesson in the value of an architect's services. It isn't easy to do one's best work in the face of a lack of appreciation and of inadequate compensation—but it is often the way to win. And it isn't really much if any harder or more costly in time and draftsmanship to make the kind of job that will make the client a salesman for the architect's services.

In order to do this, it seems to us that the architcet should concentrate his effort on the things his client will recognize as advantages, things that require no argument to make clear their value. Good composition, and good designing of detail should, of course, be the rule, for the architect's own satisfaction.

If he is a good designer he will do those things well anyhow, but they are not the things that will get the quickest and surest recognition from the client in most cases where the condition we are considering exists. The client may not know a good façade, from a bad one or good detail from bad detail, but if the architect saves him money or makes a building that is more profitable, that is better planned through the use of his services, the value of what the architect has to offer is plain to the client. If in the case of buildings constructed as an investment the architect can give the building superior earning capacity and in the case of residences if he secure greater convenience and comfort as well as a more attractive appearance, he very effectively establishes the worth of his services.

Some architects who can ill afford to do so refuse to undertake the designing of buildings in which the limitation of cost leaves no opportunity for the creation of what they regard as "architecture." Others accept such work and run it through in a perfunctory manner, regarding it as artists are supposed to regard the pictures called "pot boilers."

A better way, as has been proved time and again, is to accept the job and tackle it in all earnestness —making a bold and clean cut study of the plan requirements and developing a design that, however lacking in architectural features it may be, is good in plan and proportion. There are a number of notable examples of success achieved along this line on the streets of New York. One great hospital built not long ago is an outstanding example of good design with no unwarranted expenditure for architectural effect. In a hospital the expenditure of money for architectural features and expensive materials used for the sake of their appearance should be strictly limited because it is easy otherwise to deprive the sick of several beds or a whole ward that might have been provided with the money.

The wisdom of the architects of the Fifth Avenue Hospital and their skill in architectural design are evident, for the building has been made good architecturally as well as efficient in the treatment of the sick through good designing and with no waste of money.

The kind of thing that has been done in a big way in that case, if done in each and every case by the architects in every town, big and little, would soon do a great deal to open the eyes of the public to the value of the services an architect can render and place the members of the profession who are now suffering from inadequate compensation in a much better position.

It isn't a quick way or an easy way, but it is the strong way to meet the problem and it is always fun to take hold with both hands and earnestly work one's way through.

And the draftsman has a part in this method of curing the inadequate compensation evil, for he is the right hand of the architect with whom he works and if he does his part in the spirit we have been talking about it will make a big difference. The job that would otherwise be a distasteful "pot boiler" becomes fun when one goes at it with the intention of showing just what can be done with the thing, of making Mr. Owner sit up and take notice, of teaching him and others who intend soon to build the value of an architect's services.

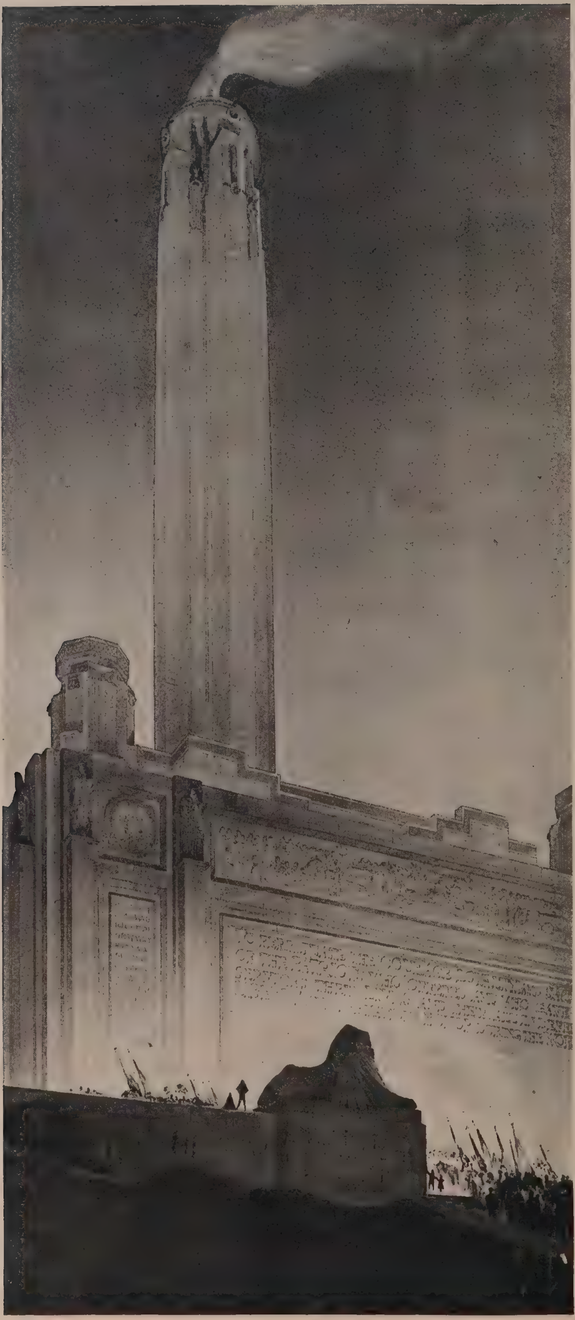
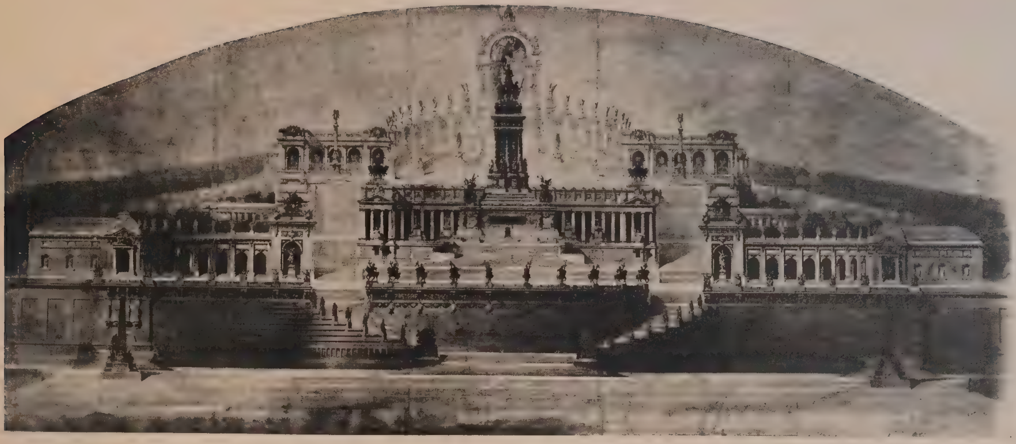


Figure 4. Perspective of Tower of Winning Design by H. Van Buren Magonigle, Competition for the Kansas City Peace Memorial.



Design by D. Despradelle for a Proposed Monument to Joan of Arc at Rouen.

THE TECHNIQUE OF RENDERING, PART VIII

By FRANCIS S. SWALES

In the serial article of which this is the eighth installment Mr. Swales explains practical methods of rendering. These methods, though based on what may be regarded as standard practice include variants that have been found effective in actual work. In preparing this article Mr. Swales has drawn freely upon the fund of experience he has gained in his architectural work.—Ed.

THE plan (Figure 1) of the Kansas City Peace Memorial, is a very interesting example of the application of the theory of "warming" plans to bring them forward or up and of "cooling" them to set them back or down, as is often done with elevations but seldom with plans. All of the lower levels of the site are toned with blue while the upper ones and the shadows of the buildings, trees, etc., are warmed with red. There is about this plan a realistic effectiveness rare among American rendered plans. It gives a very good expression of the relief of the buildings and sloping of the surrounding roads and land, much as it would appear from a balloon or airplane. The intensifying of the lighting at the most important point—the group including the tower and two flanking buildings—with an apparently easy workmanship which shows mastery of the conventions of the French School and an exhibition of a personal way and skill of handling them that could hardly fail to excite the interest of any good draftsman. Of course, drawings of this kind require a terrific amount of work—a strong stick-to-itiveness to reach completion, but that effectiveness doubtless helps enough in a competition to make the means of obtaining it—however laborious—worth while considering, and in great events such as the important and tense competition in which this design of Mr. Magonigle's was submitted every advantage should be taken to show the design at its best.

The set of competition drawings, of which there are four, is such good collective representation of the solution offered that it seems worth while to group the drawings into this part of our article so that the illustrations show the general effect of the plan (Figure 1), Elevation (Figure 2), Detail (Figure 3) and Perspective (Figure 4), and to show the technique by reproducing parts of each drawing at the actual size of the original drawing (Figures 5 to 7 inclusive). The elevation drawing which is completely inked in with fine lines employs only slightly the use of shade lines or graded lines, a few points of technique to note being the strengthening of the vertical left corner of main podium and the ground line at top of foreground steps; also the top of the lower landing of the steps at the left. The wash rendering is accomplished with comparatively few, quite pale ink washes. The sky is cooled with blue mixed with the washes, while those of the buildings are warmed with a slightly red tone—which is intensified in the foreground planes until the "color" of the ink is about warm sepia. Texture is given to the foliage and stonework with a *piquage* with pen and ink—the ink being varied in strength to agree with that of the washes. The greatest warmth and darkness surrounds and sets off the principal white of the drawing, which is the projecting podium and adjacent stairs—note particularly the grading out of the washes and stippling indicating the hedges or planting at each side of the foreground steps and the rapid gradation from elaborate detail in the foliage at the ground line at the top of steps to the very slight amount of drawing and general "killing," with washes, of the nearer parts of lower foreground. All of which is the designer's technique for the purpose of directing attention upon the inscription which explains the "reason to be" of the monument. Note also in the design that the faces of

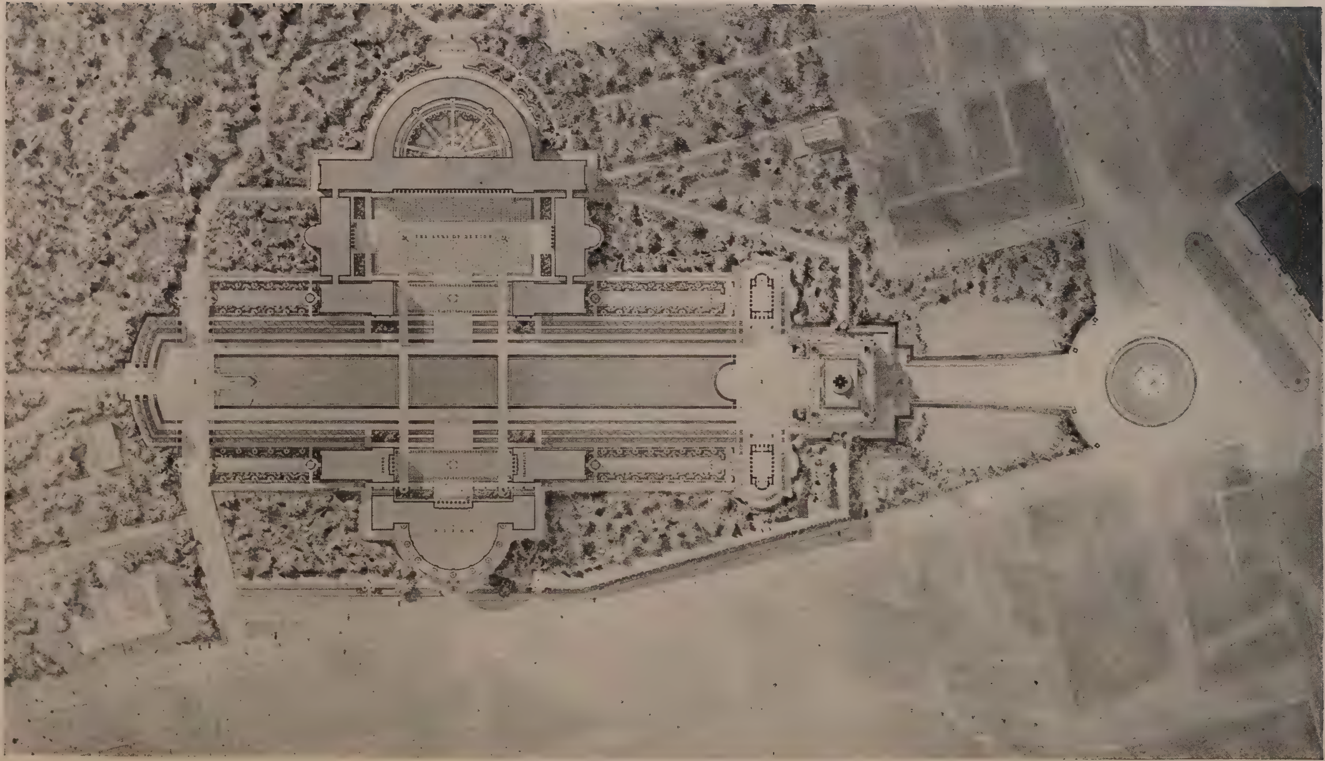


Figure 1. Plan of Winning Design by H. Van Buren Magonigle, Competition for the Kansas City Peace Memorial.

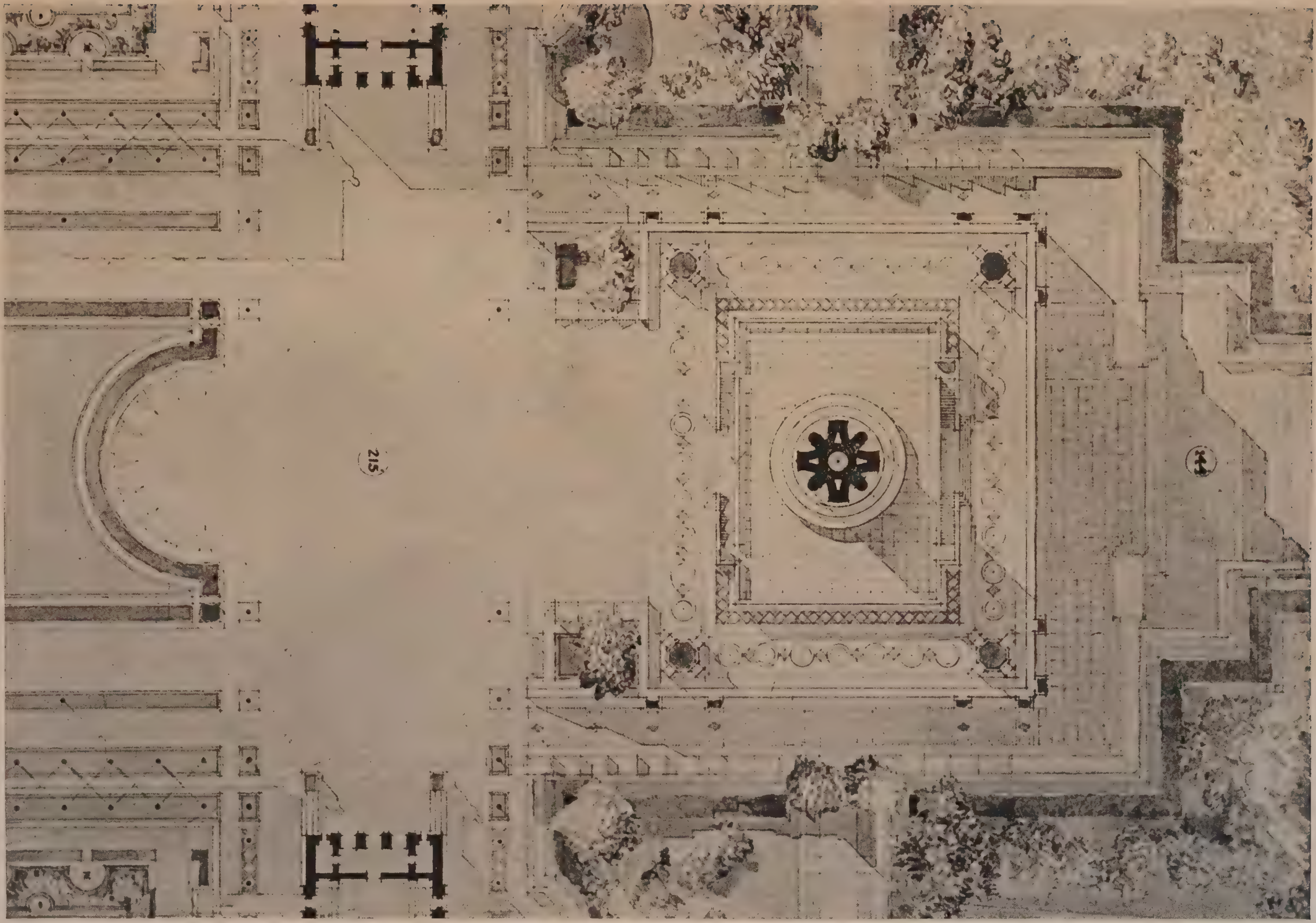


Figure 5. Detail of Plan at Actual Size of Original Drawing. Winning Design by H. Van Buren Magonigle, Competition for Kansas City Peace Memorial.

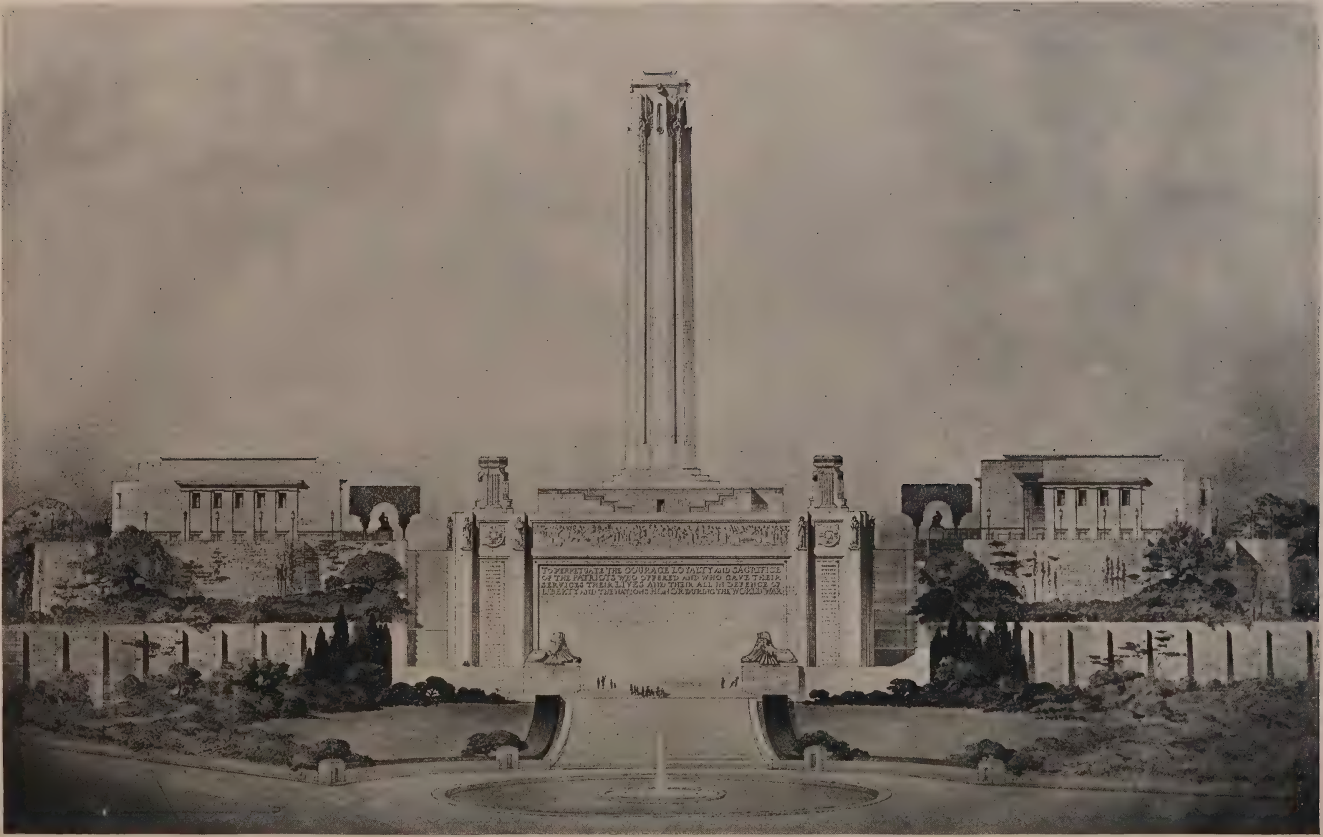

TO PERPETUATE THE COURAGE LOYALTY AND SACRIFICE
OF THE PATRIOTS WHO OFFERED AND WHO GAVE THEIR
SERVICES THEIR LIVES AND THEIR ALL IN DEFENCE OF
LIBERTY AND THE NATIONS HONOR DURING THE WORLD WAR

Figure 2. Elevation of Winning Design by H. Van Buren Magonigle, Competition for the Kansas City Peace Memorial.

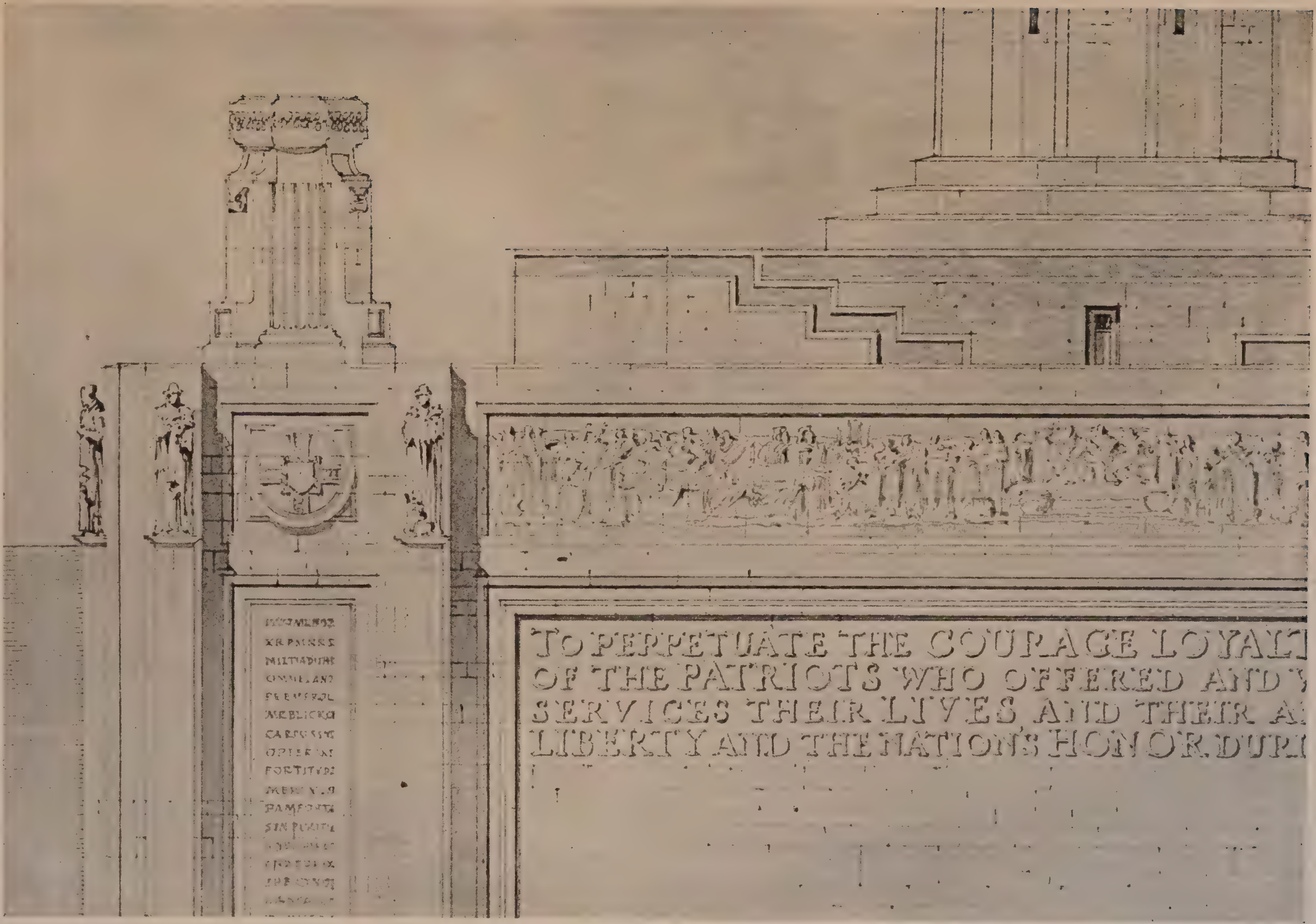

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Figure 3. Detail of Elevation. Winning Design by H. Van Buren Magonigle, Competition for the Kansas City Peace Memorial.

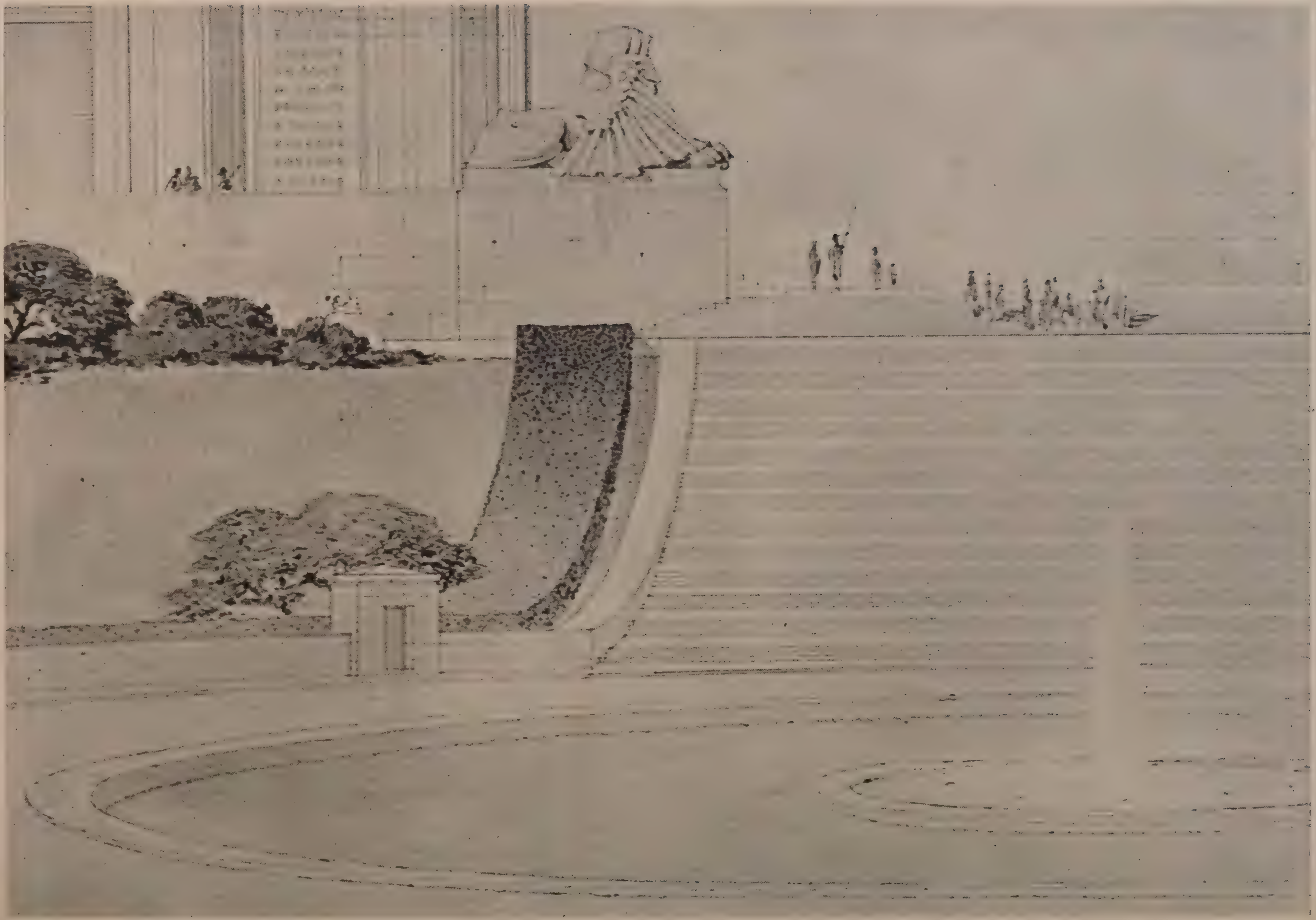


Figure 6. Detail of Elevation at Actual Size of the Original Drawing. Winning Design by H. Van Buren Magonigle, Competition for Kansas City Peace Memorial.

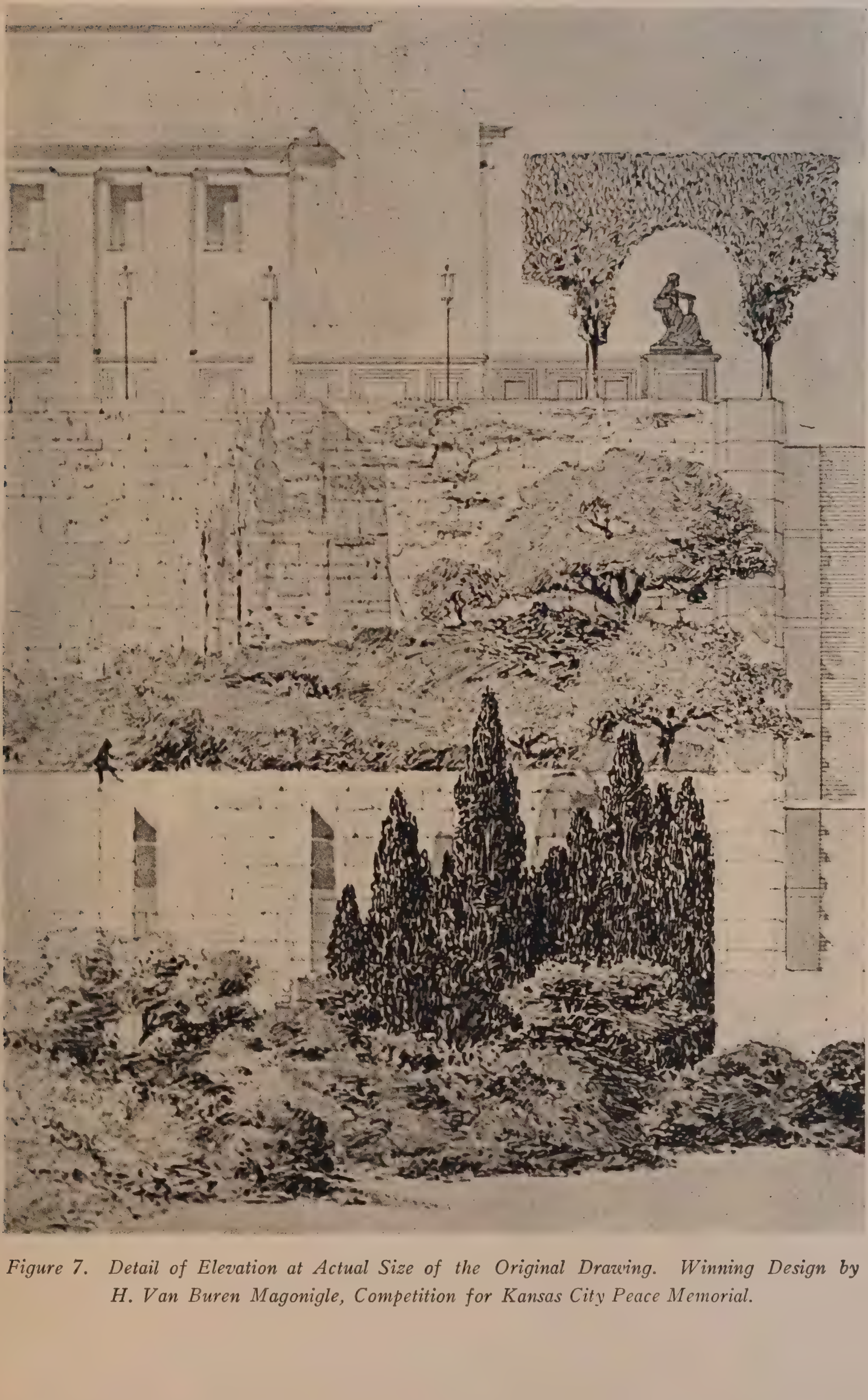


Figure 7. Detail of Elevation at Actual Size of the Original Drawing. Winning Design by H. Van Buren Magonigle, Competition for Kansas City Peace Memorial.

the sphinxes are turned toward the inscription. The three principal darks of the drawings are at the top of the tower, and the two masses of black trees at the sides, together forming the points of an almost equilateral triangle; and the principal white at the base of this triangle. The grading out of the washes rendering the lower part of the tower until at its base it is as light as the sky; and of handling the plinth of the tower, frieze of the podium, and inscription as three successive advancing bands — emphasizing the last by limiting "whites" while the "gray" of the frieze is picked up on either side by statues and panels and carried the full width of the design is an exceptionally skillful presentation of very well thought out composition —a model worth having around when rendering any similar subject. The detail (Figure 6) is practically a free rendering in water color of the upper part of the tower. It is so simple in drawing and coloring as to impress the casual observer as being a sketch detail, rapidly and easily drawn — a quick, offhand production —a mere illustration. But there is a vast amount of knowingness about it. I suspect that it was not sheer accident or haste that caused just a few vertical stone joints to be so well placed and the horizontal joints seem to slip in with a pleasing negligence where they came while concentration was being placed on the figures in the high balcony and the expression of their intentness upon the distant windings of the river beyond Kansas City. This drawing is a good representative of a manner of technique and method which meets popular understanding and does something to awaken the imagination. It is a first class academic presentation, with a Frenchman's facility for disguising the pains taken, by a well studied expression of indifference to and ease of technique.

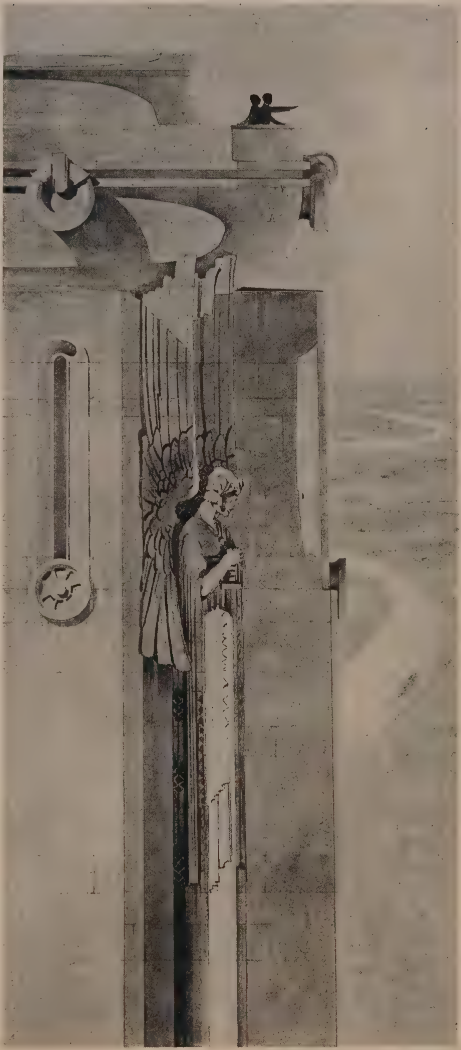
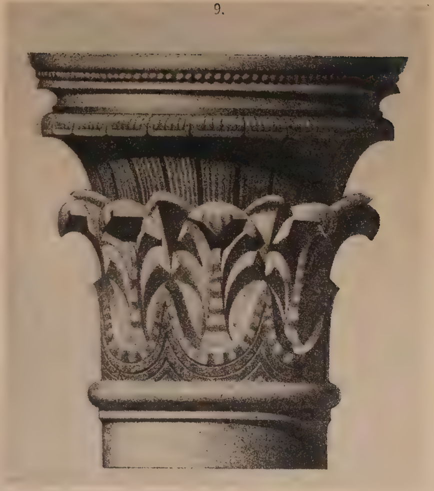


Figure 8. Detail of Tower at Actual Size of Original Drawing. Winning Design by H. Van Buren Magonigle, Competition for Kansas City Peace Memorial.

Somewhere between the orthodox, academic rendered wash drawing and the free rendering comes a type of drawing which belongs to a middle ground. The method is academic but the effect is free and naturalistic or even dramatic. Mr. Magonigle's perspective (Figure 4) is a fine example of such drawing. The whole drawing is treated as a moonlight scene and stars are represented in a sky of cold blue, against the upper part of the tower shows "white," that is warmed with red and yellow washes; the shadows are mainly of carmine. The lower part of the tower and upper part of the podium are shown in warm grays. A strong dramatic effect is produced by the introduction of an artificial lighting coming from torches carried in the part of the procession which is supposed to be passing behind the sphinx. The lighting effect is maintained by a luminous quality in the washes, obtained by running many washes, one over the other, and grading each wash sharply from dark to light. Against the artificial light the silhouettes of onlookers are shown in dark blue, while the procession is illuminated to display in the flags and uniforms lively points of red, yellow and bright blue. The tone of the silhouetted figures of onlookers is warmed and enlivened with touches of red and black.

The wall and sphinx in the foreground are rendered in a deep blue-gray over red under-washes and the high lights on sphinx, etc., thrown by the torches, are indicated with bright orange. The immediate foreground, rocks and foliage are predominantly cobalt blue and viridian. The texture of foliage is given by use of pen and diluted ink, giving that touch of ease and freedom from the mechanical style which is too often apparent in ordinary academic rendering.

9.



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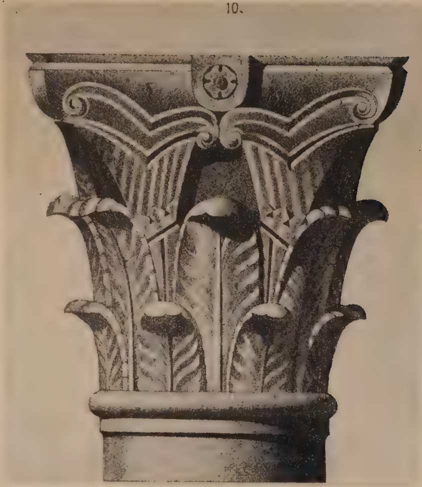

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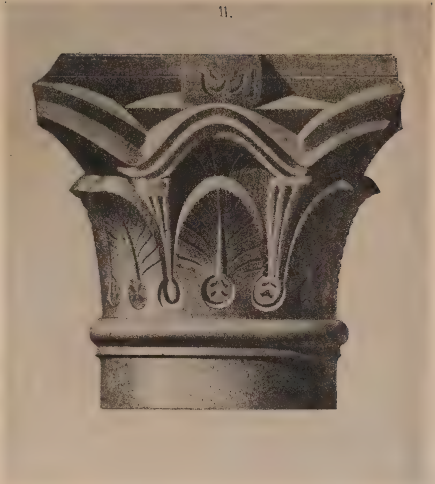

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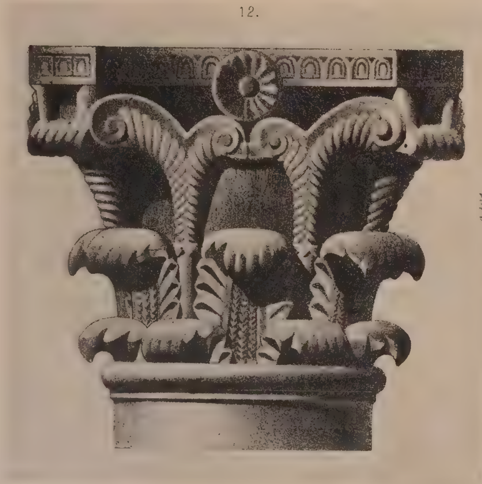

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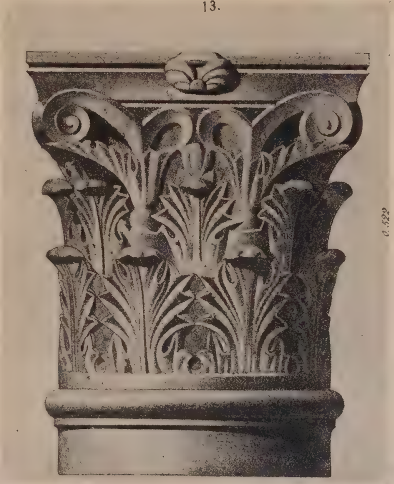

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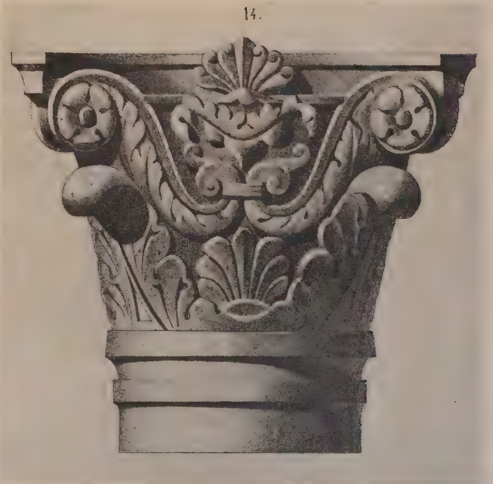
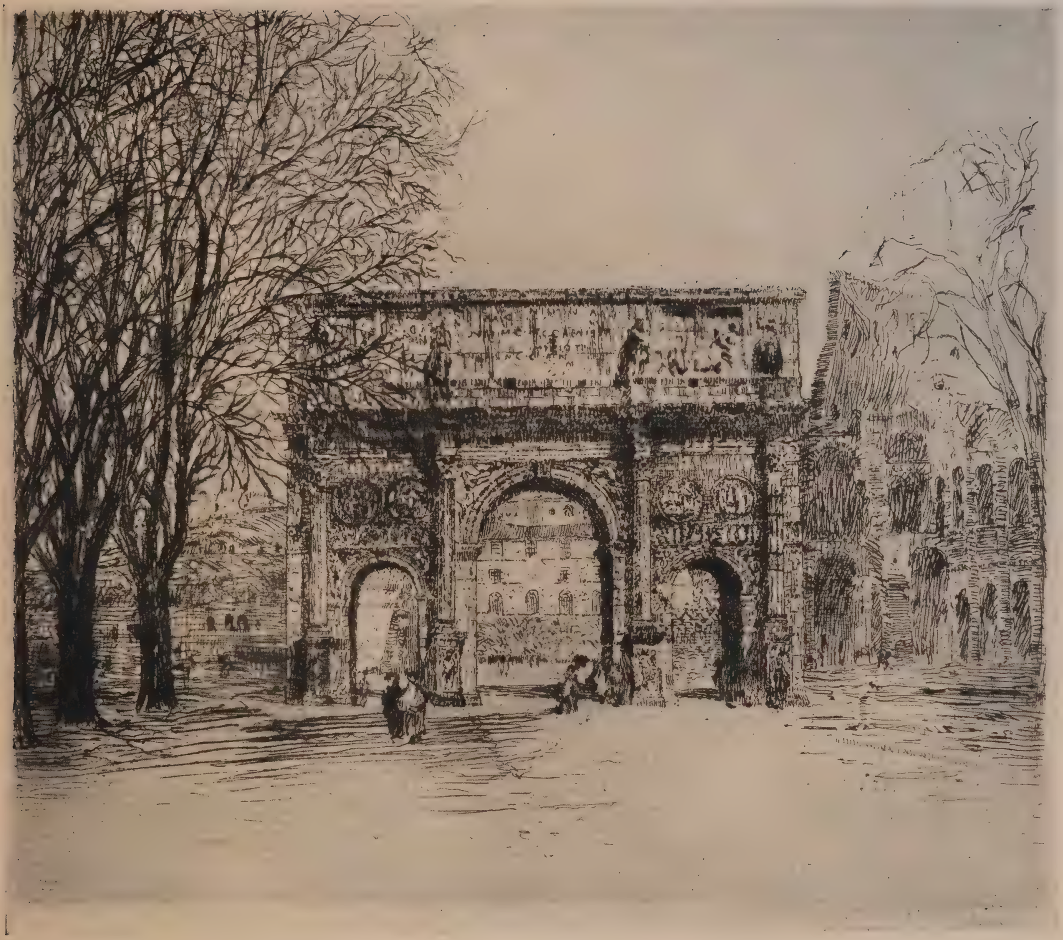


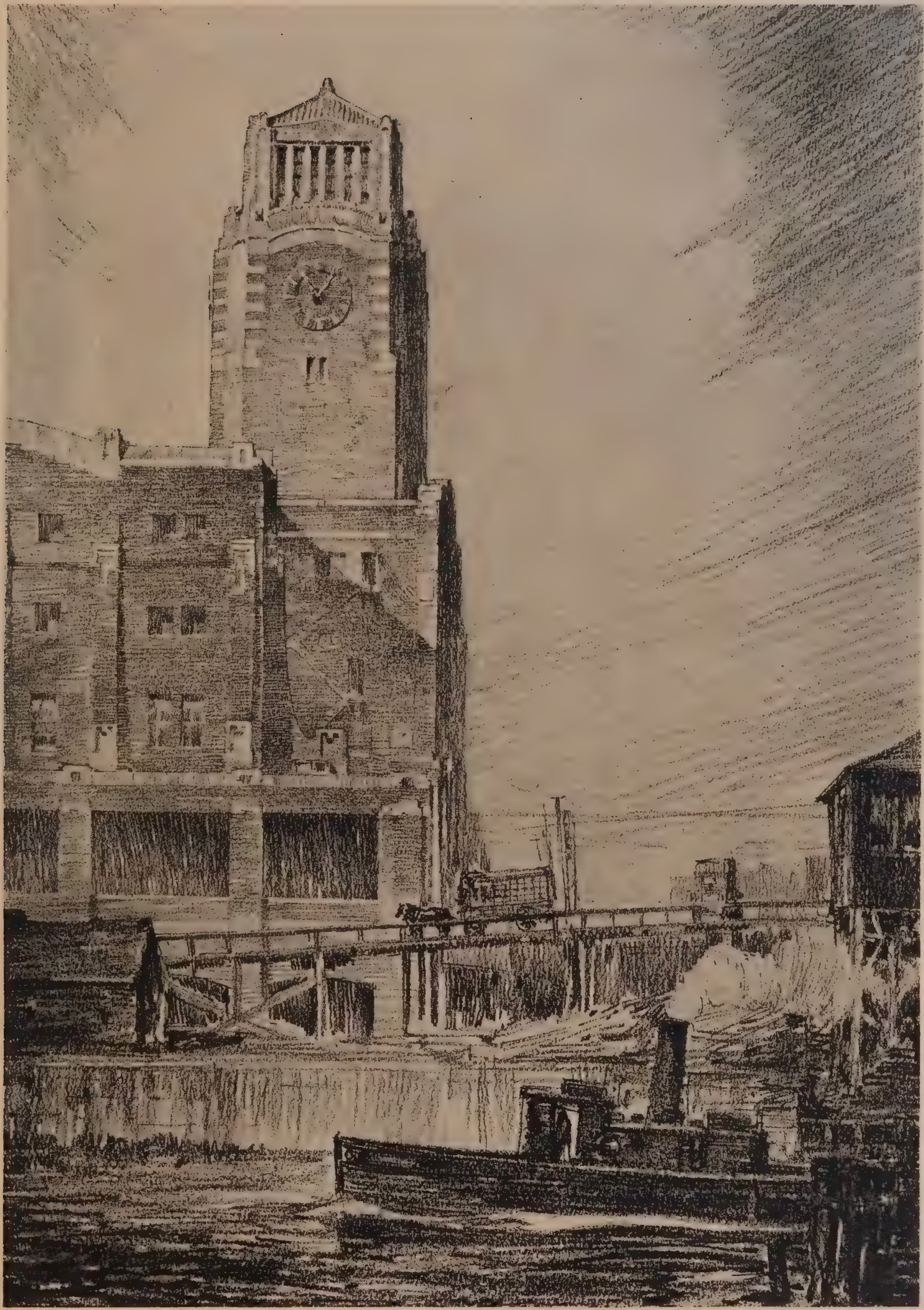
CAPITALS IN THE CATHEDRAL AT CORDOVA
FROM "SPANISH MASTERPIECES OF ARCHITECTURE."

On the other side of this sheet is shown an unusually interesting group of capitals representing a phase of Spanish architecture that has much inspiration to offer the present-day architect. This plate is from "Masterpieces of Spanish Architecture," a book now being printed by the publishers of PENCIL POINTS. *This book will be Vol. IV of "The Library of Architectural Documents."*



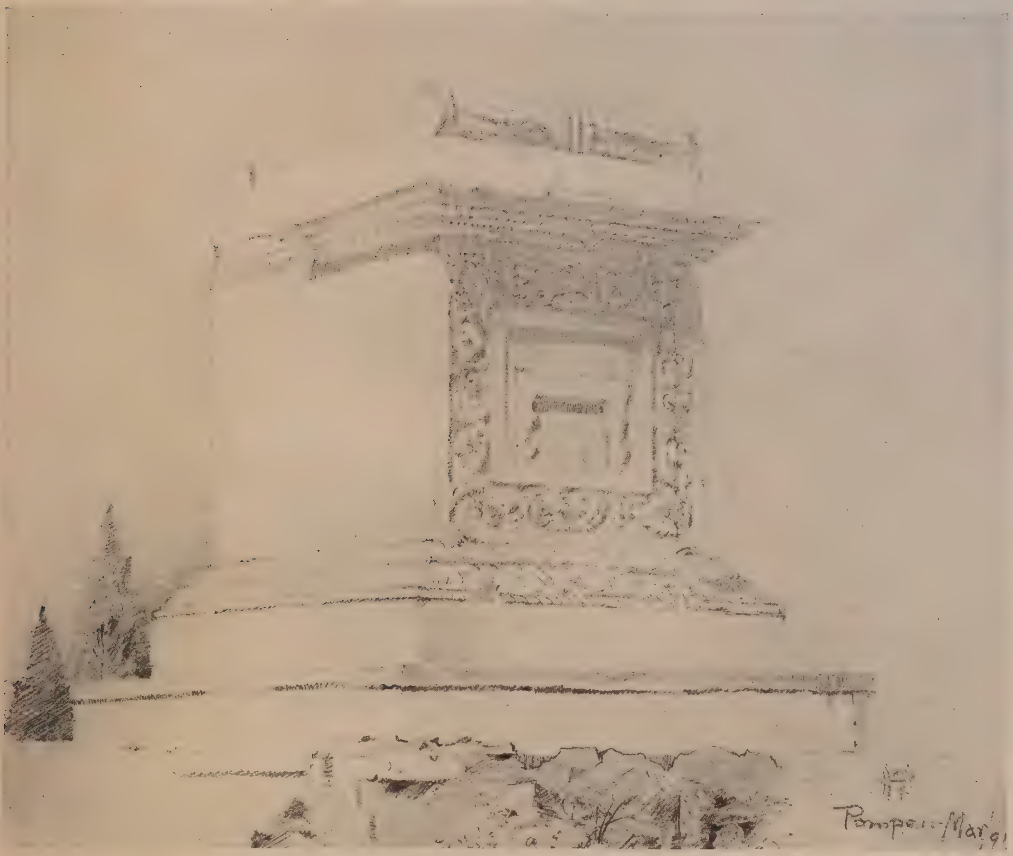
ARCH OF CONSTANTINE, ETCHING BY EDMUND L. ELLIS

The etching of the Arch of Constantine, Rome, by Edmund L. Ellis, which is reproduced on the other side of this sheet is unusual in that it shows the arch as it appears in its setting of trees and houses, not presented in the dramatic manner in which this subject is usually treated. It was drawn from a photograph which Louis K. Comstock, a friend of Mr. Ellis, recently sent to him from Italy. This etching is a skillful and appreciative interpretation as well as a delightful picture.



PENCIL SKETCH BY B. C. GREENGARD, PENNSYLVANIA FREIGHT TERMINAL, CHICAGO

The pencil sketch by Mr. Greengard shown on the other side of this sheet is marked by freedom and sureness of drawing and simplicity of treatment. The facts and the spirit of the scene are conveyed in a rapid sketch that has a sense of completion and mastery.



PENCIL SKETCH MADE AT POMPEII, BY WALTER B. CHAMBERS

On the other side of this sheet is reproduced one of the many interesting sketches made by Walter B. Chambers during his travels in Europe in 1889 *and* 1891 *when he made several sketching trips. It is interesting both as a study of an architectural subject and as an example of sketching technique.*

MASTER DRAFTSMEN, IV

LOUIS CHRISTIAN MULLGARDT

FROM some of L. C. Mullgardt's letters are quoted the following passages which give glimpses into the thoughts of the man, a sketch impression of conditions in Europe following the war, a hint of his firm views as to architects and architecture and a touch of reflection and humor.

"What a lot of things have taken place since we were together last. It hardly seems to be like the world we used to know. Europe, of course, has gone completely crazy. It was bad enough when we lived in London. The recent slaughter and destruction has completely jumbled their sense of proportion. I do hope that we won't be led into trying to put their house in order."

"If an architect can't express his thoughts fluently, graphically, then he is like a blind fiddler who has to depend on a dog to get anywhere. Even then he may be only a poor copy-cat fiddler, without any worth while ideas of his own."

To escape from boring you stiff, by chawing over and over the old thoughts and spittin' fire at a subject which you and I are perfectly agreed on . . . etc."

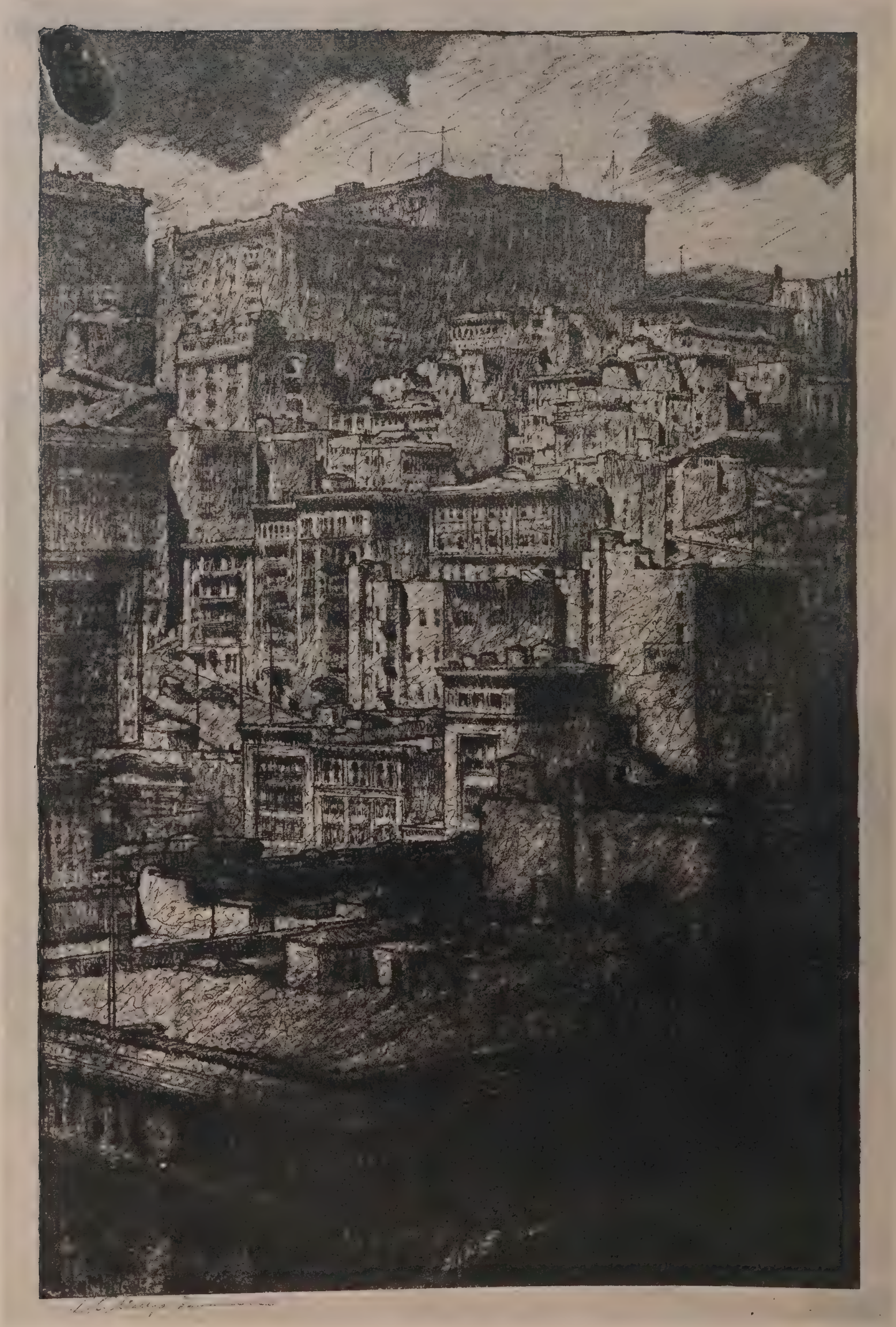
Louis Christian Mullgardt

We have met in our travels at Chicago, Philadelphia, St. Louis, London, San Francisco and elsewhere. Our discussion has always turned to architecture—its design and presentation—which allegation may suggest an excess of seriousness little in accord with some of the facts. For example just before he left St. Louis for London—about twenty years ago—he "wished" one of his clients on me. The client owned a workmen's lodging house and was having a row with the Building Department owing to some changes demanded by the latter. This client was willing to do "anything within reason," except obey the mandates of the Department. So he had all kinds of plans made and kept "the department" busy examining them, month after month. I don't know how many months Mullgardt carried along with him before he decided to go on a visit to Europe, and sent him to me. I made plans, and plans! and plans!! "The Department" never got through examining the latest revisions—as far as I know—for I too went to Europe and wished the client on somebody else. I suppose he and his planning are still going strong.

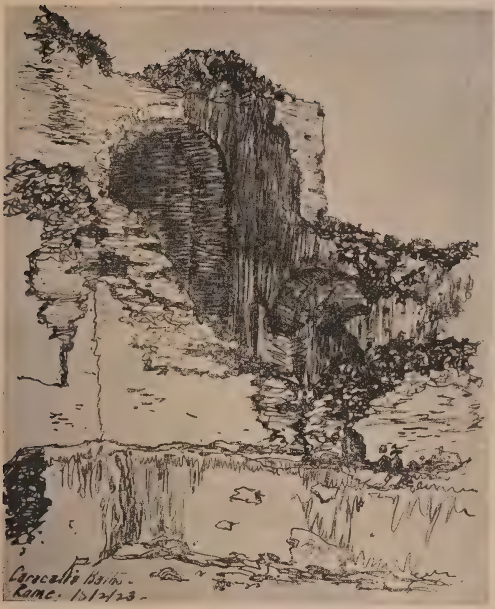
In London Mr. Mullgardt planned part of the Savoy Hotel, and, as consulting architect to James Stewart & Co., the builders, had the direction of putting some English plans in such shape that an American building superintendent might understand them. The mere object of which was to save two or three years' time in building operations. He had been in London several months when I arrived from Paris to take up some similar work on other buildings. As I began to discover the meanings of the London Building Act—the original of which was probably written to limit the Tower of Babel—I consulted Mullgardt regarding the "authorities." One morning I 'phoned him as follows: "Listen! here's a brand new one! The District Surveyor says, that if we use steel columns in the outside walls of the building *they will count as flues!* and he will require us to thicken the masonry to compensate for the holes made by the columns." A roar of laughter was the immediate response; then he said, "I'm glad they have pulled that on *you* too!"

I remembered that, when I received his letter containing the first quotation in this article, stating, "Europe of course has gone completely crazy. It was bad enough when we lived in London." (Well, what difference does twenty years make?)

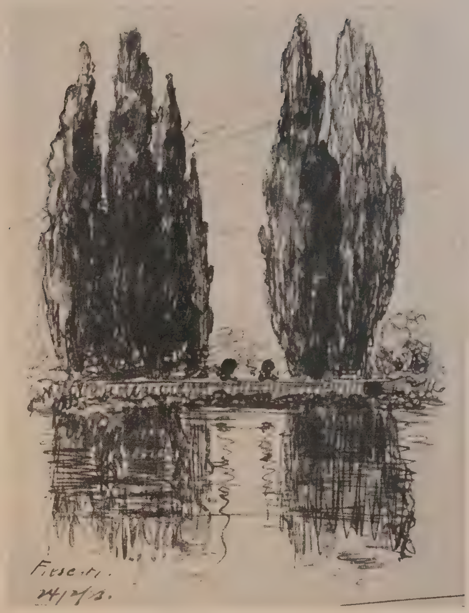
Long before the above incidents took place—and they serve to suggest that the drafting end of the design and presentation of architecture is not altogether a matter of the ornamental and artistic sides—L. C. Mullgardt had had experience and shown abilities of a kind that "leave a clear trail behind." His work on the Fisheries Building at the Chicago "World's Fair" did most to cause attention to be drawn to his talent as a designer of



Lithograph by Louis Christian Mullgardt. A Hillside of a Portion of San Francisco, Cal.


Caracalla Baths.
Rome. 13/2/23.

Baths of Caracalla, Rome.



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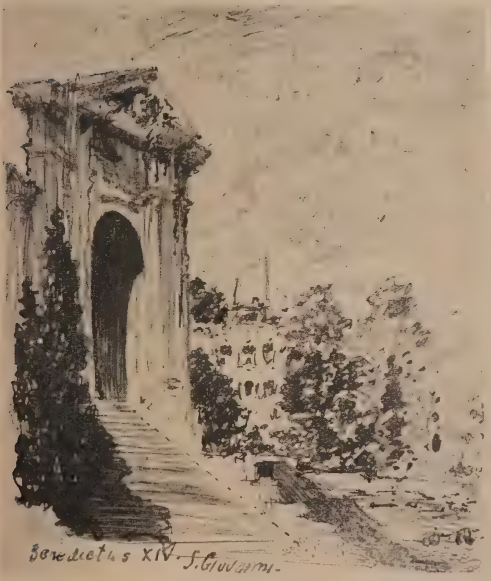
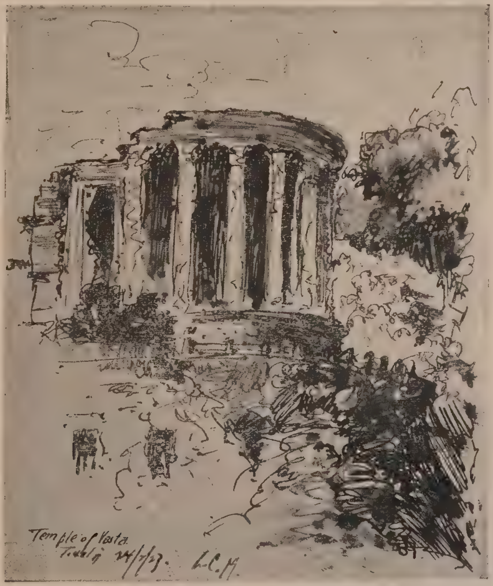
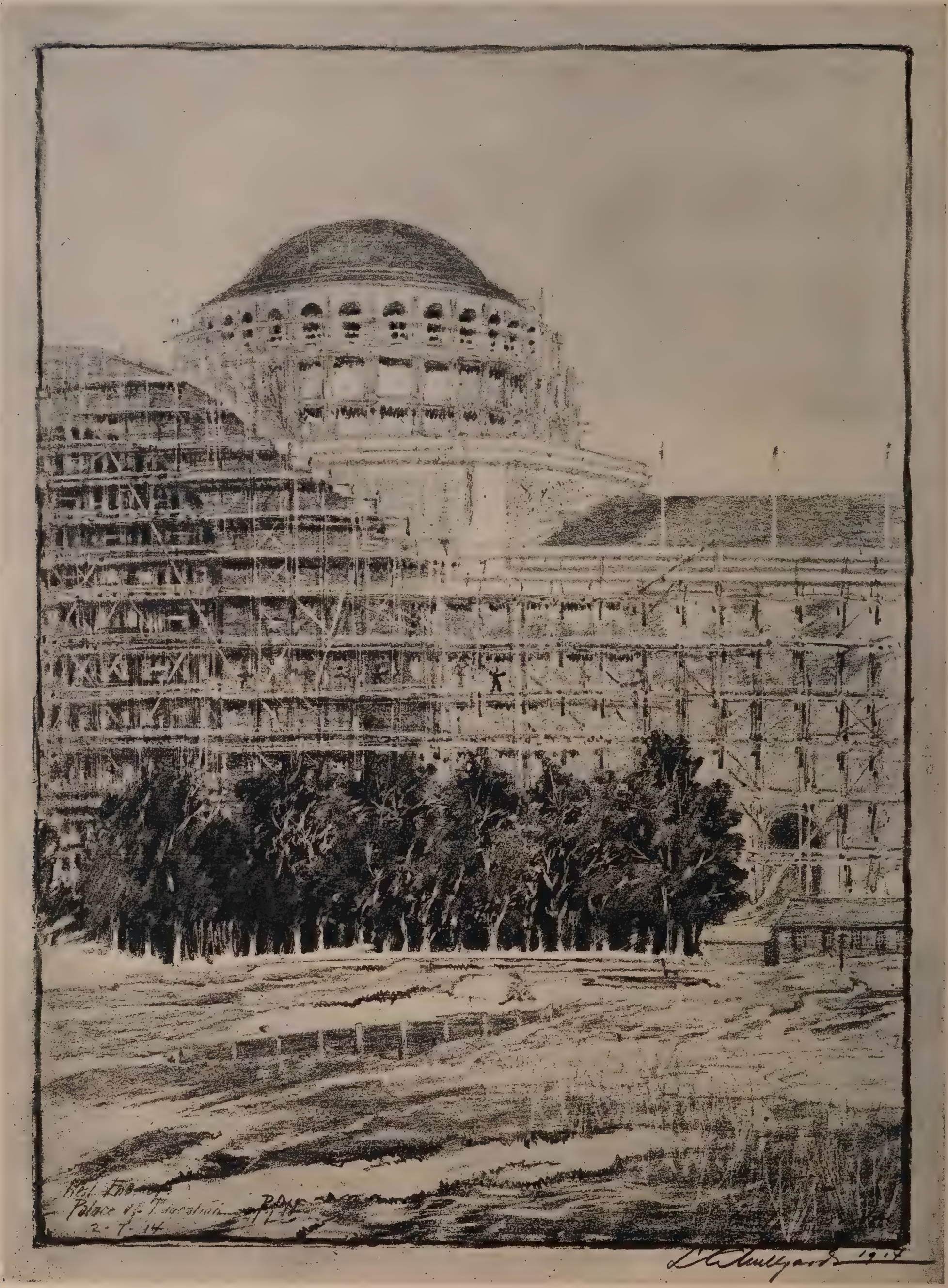

Benedictus XIV. S. Giovanni.

S. Giovanni.

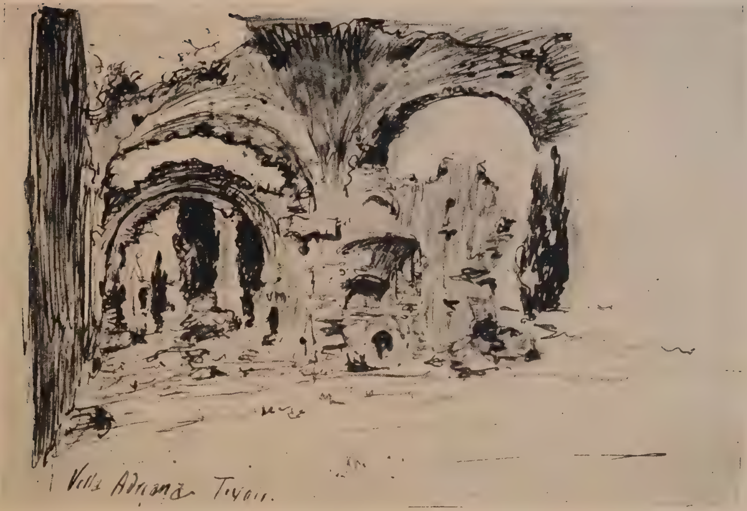

Temple of Vesta.
Tivoli 24/2/23.
L.C.M.

Temple of Vesta, Tivoli.

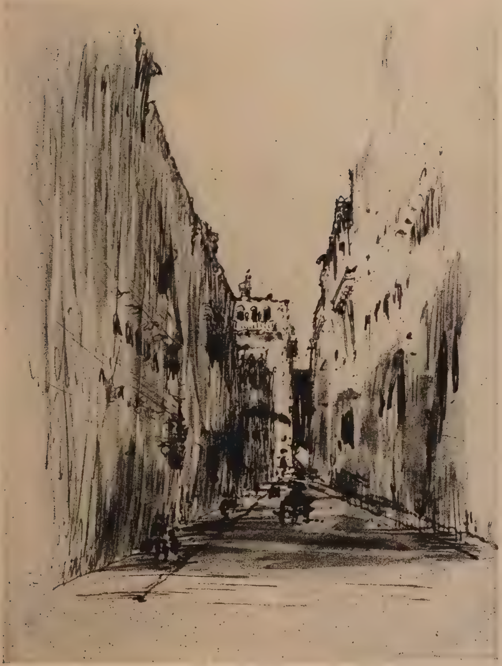
Pen and Ink Sketches by Louis Christian Mullgardt



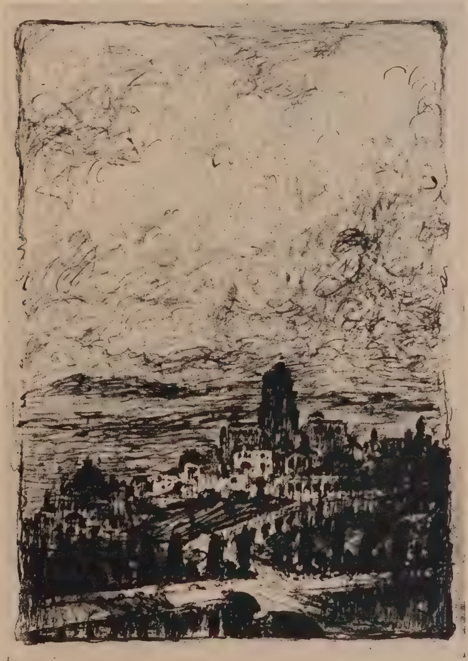
Lithograph by Louis Christian Mullgardt. Palace of Education, Panama-Pacific International Exposition.


Villa Adriana Tivoli.

Villa Adriana, Tivoli.

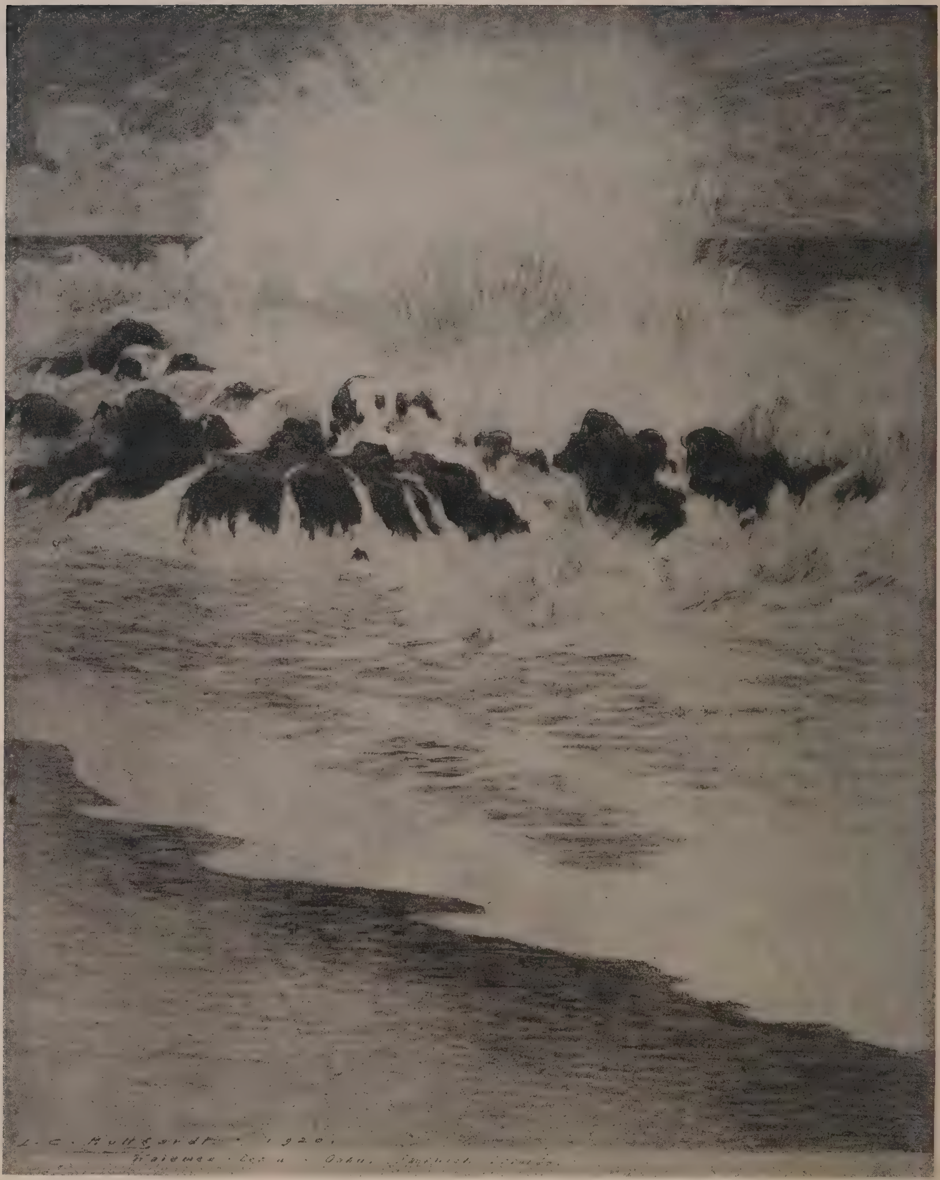


Street in Venice.



A Sketch Made in Italy.

Pen and Ink Sketches by Louis Christian Mullgardt


L. C. Mullgardt · 1920.

Drawing by Louis Christian Mullgardt. Waiamea Beach, Oahu, Sandwich Islands.

Sketch by L. C. Mullgardt. Pearl River. Canton to Hong Kong.

interesting architecture; but even earlier than that—soon after he graduated from Harvard—several of his pen-and-ink sketches published in the magazines, indicated the advent of an artist with an individual point of view; and a way of expressing his vision to cause it to linger in one's memory. After the work at the Chicago Exposition he went to St. Louis to practice architecture; his designs and drawings appeared regularly at the annual architectural exhibitions. Among them, a design for a hotel at Hot Springs, Arkansas, (while in partnership with Messrs. Stewart and McClure) which, though belonging to no previous period or architectural style, told its own story clearly: a big, hospitable, Southern inn.

After his work in London and other things which he designed at Manchester and up in the North of Scotland, he returned to the United States and went to San Francisco.

One day, while meandering along some show-windows of the shops of Vienna, I was slapped on the shoulder by a large, glowing, be-caned, be-spatted, Englishman, his gloves in his hand and his handkerchief up his sleeve. "Just to think of seeing you heah!" he said. "Do you know *he* was in it?—When the earthquake came he picked up his boy under one arm, and his wife's harp under the other, dashed into the road and wheeled them to safety—miles and miles over the hills." I had seen that Britisher, somewhere, before—not quite sure when, and did not know his name. It turned out that he, and Mullgardt and I had met once or twice in London—two or three years previously—and it was of Mullgardt that he spoke—and of the San Francisco "earthquake" (it is called "the fire" by San Franciscans). I had seen the Mullgardt's small boy and Mrs. Mullgardt's large harp; and was impressed with a vision of Louis Christian Mullgardt "dashing—miles and miles over the hills," of San Francisco, with each under an arm, or both in a wheelbarrow — leaving, of course, all other valuables — his reams of small and large drawings, etchings, lithographs, posters, water colors, etc.

Such was my moving picture of "L. C. M." during some years. But in the course of events I went to San Francisco, and one morning in 1913, located his address in the "Chronicle" Building. I had already discovered that San Francisco was almost completely rebuilt, with no marks of an earthquake and few of a fire—but somehow I expected to find the boy and the harp and perhaps a wheelbarrow in the office. What I ran into were beautiful sketches, studies, tracings, details, models of ornament in clay and plastaline, and studies in oil color of the decorative panels for his "Court of the Ages" at the Panama-Pacific Exposition. All very fresh in vision and originality which spoke the prologue to the actual court as it appeared a year later—one of the most impressive works of architecture that have been produced in this country.

Sketch by L. C. Mullgardt, "A Chinese Rice Bird."

Mullgardt was in his shirt with a handkerchief around his collar—a hot day, and he was working with energy. But he pulled out a package of new sketches he had been making in the open country and out at the Exposition grounds:—"I want to show you some new lithographs I am making! This is a trick Pennell showed me!—this is the way it is done! . . . etc." I believe I could have made some myself, after receiving those instructions, and was almost worked up to the pitch of enthusiasm to go out and "go to it."

During the past year Mr. Mullgardt took a trip around the world and returned to San Francisco with dozens of sketches and drawings made with a fountain pen on all sorts of cards, envelopes, a piece of silk, the entertainment programs of the ships he sailed on, etc. The subjects include everything:—

(*Continued on Page* 65)

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EXHIBIT OF CHURCH ARCHITECTURE

AT THE Quadrennial International Conference of the Methodist Episcopal Church held in Springfield, Mass., during the month of May, the Bureau of Architecture of the Methodist Episcopal Church had an exhibit filling one of the rooms of the Municipal Auditorium. This consisted of 14 panels, 36″ x 48″ in size, several mounted renderings of exteriors, transparencies, professional journals, books on architecture and folders containing blue prints, showing suggested plans in sketch form at $\frac{1}{16}$″ scale.

A feature of the exhibit was a panel showing elevation and floor plans of a "Seven Day a Week Church." The floor plans were developed on the departmentalized plan now growing in usage in the educational section of church buildings. Around the margin of the panel were photographs illustrating various activities conducted in such rooms. Ribbons extended from the rooms shown on the floor plans to lists of activities possible and groups served in each of the rooms of the building and illustrated by the photographs.

The Methodist Episcopal Bureau of Architecture is endeavoring to promote throughout its constituency a demand for church equipment adequate for the modern needs, particularly for the requirements of a departmentalized school of Religious Education in each church plant.

AMERICAN INSTITUTE TO HOLD BIG EXPOSITION OF INVENTIONS

THOSE interested in architecture and building will be interested in the Exposition of Inventions to be held, December 8th to 13th inclusive, 1924, in the famous Engineering Societies Building, New York City. The American Institute of the City of New York is handling this display through its Inventor's Section, with behind it an experience of ninety-six years in fostering and portraying American industrial life.

A feature of the Exposition will be exhibits from the leading American industries showing developments of various machines, utilities and processing methods. In all fields the ingenuity of the inventor and the part he has played in the progress of America will be emphasized.

In this display of American inventions the American Institute will be continuing with a new emphasis almost a century's encouragement of inventors and introduction of their works to the public. Among inventions now used throughout the world that were first displayed to the public at earlier All-American fairs of the Institute are the Morse telegraph, the Hoe lightning printing press, the McCormick reaper, the Howe sewing machine, the Bell telephone, the Colt revolver, the Francis metallic life boat, and many others.

The American Institute also established the first permanent exhibit—an idea later adopted in various industries—where "machines, models, specimens and drawings were displayed to the public. Great annual fairs of the Institute, begun in 1828 and held at such widely known places in their times as Niblo's Garden, Castle Garden, Crystal Palace, Palace Garden, the Academy of Music and Madison Square Garden, in New York City, portrayed year after year the advancements in agriculture, commerce, manufactures, science and the arts, until, with the expansion of the country's business in the last quarter century, the idea developed into the more famous world fairs and national and international industrial expositions under various auspices and managements. Arrangements for the display of working models or actual devices at the Exposition of Inventions can be arranged through a Committee of the American Institute at 47 West 34th Street, New York City. All proposed displays are subject to approval by the Institute, it being the desire to show only those things of sound worth.

THE AMERICAN ACADEMY IN ROME

FROM letters recently received by C. Grant LaFarge, Secretary of the American Academy in Rome, from Gorham P. Stevens, Director, we quote the following items:

"Professors Rolfe, Lord, Van Buren and Curtis have left the Academy for the summer. Professor Showerman is due in a few days with his forty students in the Summer School: he has a most attractive program.

"Of the third year men, Hafner, Sowerby and Schwarz have left the Academy and are travelling about Europe in various places.

"The Academy was asked to send representative work to the International Congress of Architectural Education of the Royal Society of British Architects, to be held toward the end of this month. We have sent thirty-seven photographic enlargements.

"We are all delighted that Jennewein is to be with us next winter. Lascari is to move into one of the painters' studios on the first floor, so that Jennewein may have a sculptor's studio in which to work up his important pediment for the Museum of Philadelphia.

"Lascari's mosaic for the Church of Saint Matthew's at Washington is advancing splendidly. Yesterday he had about a quarter of one of the whole pendentives assembled in mosaic on the floor of his studio. He has an excellent Byzantine technique. We are looking into the question of labor laws in America, as Lascari wishes to take back his best worker here to set the mosaics in place.

"Dr. Esther Van Deman, Research Fellow of the Carnegie Institution, has been working up an interesting article for the American Journal of Archaeology. Her researches were made upon a corner of the Palatine, and she has cleverly distinguished between the work of Caligula, Domitian and Hadrian.

"Dr. Whitehead's work upon the transformation of Roman buildings into Christian churches is advancing well.

"Lloyd Melville Hendrick, Jr., a former visiting student at the Academy, has written an interesting article upon the way the crowds reached their seats in the Colosseum. This is an important study upon circulation, and I hope that he will work his article into shape for our Memoirs.

"Professor David M. Robinson writes from Asia Minor that he has made some remarkable excavations, which are particularly interesting in architectural and epigraphical material. At his request, we have sent him Mr. Frederick Woodbridge, a visiting student in architecture at the Academy; he is also a graduate of Amherst and the School of Architecture at Columbia.

"We all deeply feel the death of Mrs. Frederick Crowninshield. She always took a great interest in the Fellows and their work, and will be greatly missed by all of us.

"Professor and Mrs. McClellan were in Rome two days and went through the studios."

From a letter recently received from Frank P. Fairbanks, Professor in Charge, School of Fine Arts, we quote the following items:

"Our senior architect, Hafner, has concluded his required work and left the Academy. He is to travel in Italy, France and England, before returning to New York in October.

"Floegel, second year painter has brought back from France and England some very fine studies of stained glass. He has laid out his work to include a special study for each of his three years at the Academy some technical phase of decorative treatment, such as fresco the first year, mosaic the second year, and stained glass his final year.

"Newton, a landscape architect, has just returned from an eleven weeks' trip to Northern Italy. Seven of his weeks were spent in Florence, Venice, Bellagio and Siena."

THE ARCHITECTURAL BASEBALL LEAGUE OF NEW YORK

THE Architectural Baseball League of New York has organized for the season with the following offices represented:

Alfred C. Bossom,		New York City
Cass Gilbert		" " "
James Gamble Rogers		" " "
Starrett & Van Vleck		" " "
Warren & Wetmore		" " "
Thomas Lamb		" " "
Geo. B. Post & Sons W. L. Stoddart	combined	" " "
Guilbert & Betelle		Newark, N. J.

The first League game was played on Wednesday, July 9th, 1924, and the other teams opened their season on July 10th, 1924. The League has organized an all star travelling team to represent the League and is desirous of booking games with all architectural offices, clubs and all other organizations, providing that a guarantee is offered covering all expenses.

All games are to be played on Saturday afternoons.

Kindly mail all letters pertaining to games to M. L. J. Scheffer, Permanent Chairman of the Architectural Baseball League, 367 Lexington Avenue, New York, N. Y., care Jas. Gamble Rogers, Architect.

ARCHITECTURAL CLUB OF NEW HAVEN

THE Club's annual outing held on June 28th was attended by about fifty architects of the state and their friends. It was an unqualified success—one of the most enjoyable the Club has yet held. The dinner was served al-fresco on the lawn in front of the Field farm house. An element of pleasurable surprise was obtained in viewing this old dwelling built about 1800. It was found to be replete with interest to those with a penchant for Colonial details. The house was built by the great grandfather of the present occupant and owner. The several committees recently appointed by President del Grella have planned an unusually interesting and active program for next season and we shall be happy to give out the details when the program is entirely arranged.

We have just sent a young Connecticut architect to France as a student in the American Summer School at Fontainebleau. This student, Mr. Elbert J. Richmond, was selected through a competition.

The Club has recently voted to establish a medal of honor, to be awarded annually at the discretion of the jury, which is to be known as The Leoni Warren Robinson Memorial Medal. The medal will be awarded for the first time at the opening of the club's next exhibition, February 14, 1925. H. Story Granger is chairman of the committee to obtain the medal and George H. Gray is chairman of the jury of award. It is required that the medal be awarded to an architect resident and practicing in Connecticut.

Elbert J. Richmond.

ELBERT J. RICHMOND of Waterbury, Conn., one of the best known of the younger Connecticut architects, was the winner of the scholarship to the Summer School for American Architects at Fontainebleau, France, awarded by The Architectural Club of New Haven, for the first time in May of this year.

Mr. Richmond was born in Wallingford, Conn., about thirty-five years ago. His family later moved to Waterbury where he started his architectural career as an office boy with the firm of Driggs & Hunt. Under the instruction of these architects he rapidly developed into a dependable draftsman and at the same time evidenced an extraordinary aptitude for domestic design.

While yet in his early twenties he went to New Haven where he soon became chief draftsman in the office of C. F. Townsend, and later in that of Philip Sellers. During his practice in New Haven he is credited with having planned some of the most attractive homes built in that city during the past decade.

The purpose of the New Haven Club's Fontainebleau Scholarship is to assist just such young architects as Mr. Richmond. Therefore, its first award is generally conceded to have been most satisfactory.

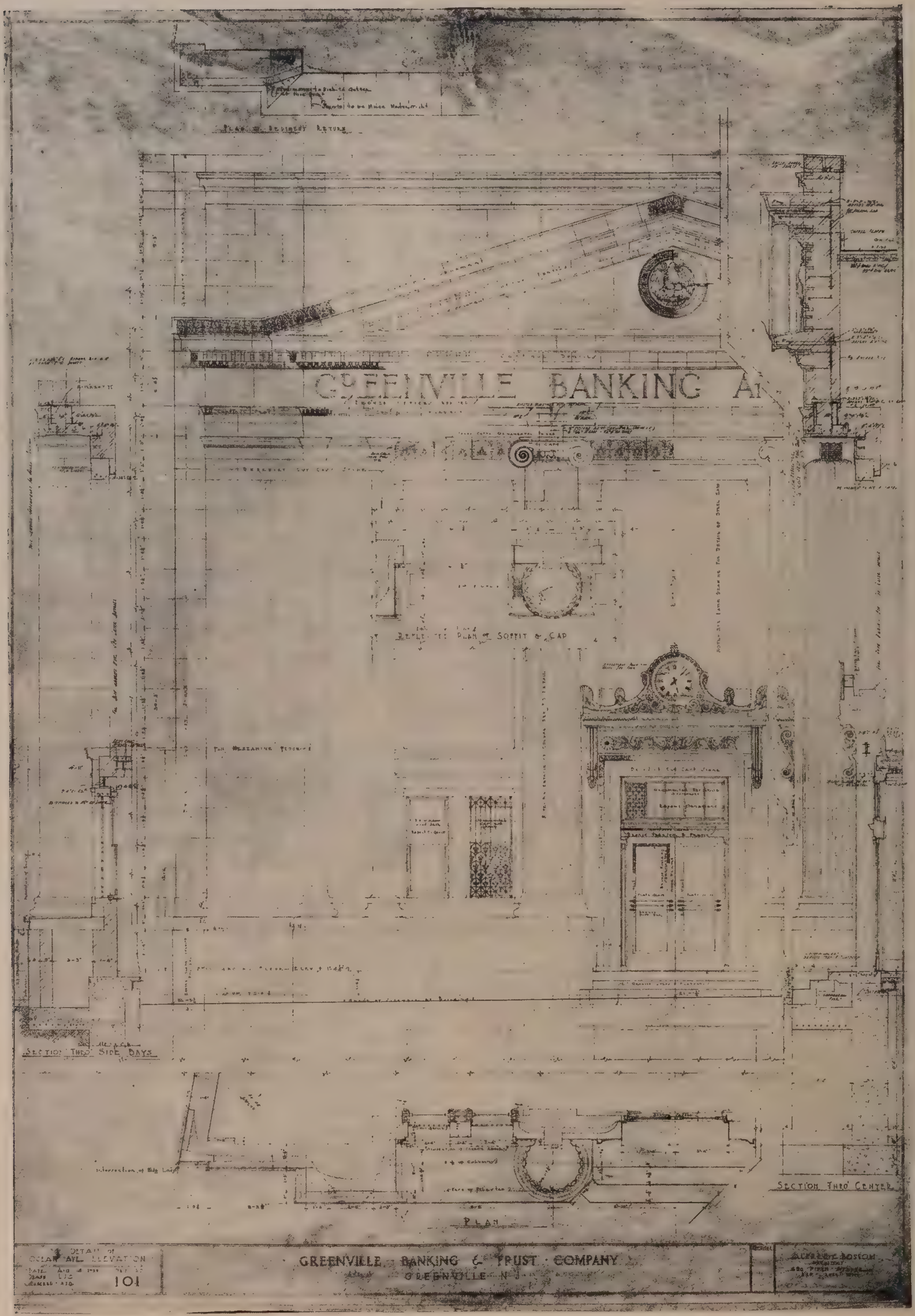
Mr. Richmond was given a bon-voyage dinner by some twenty or more of his architectural friends in New Haven, at the Hotel Bishop, on the Friday evening preceding his departure for France.

JOHN A. GURD

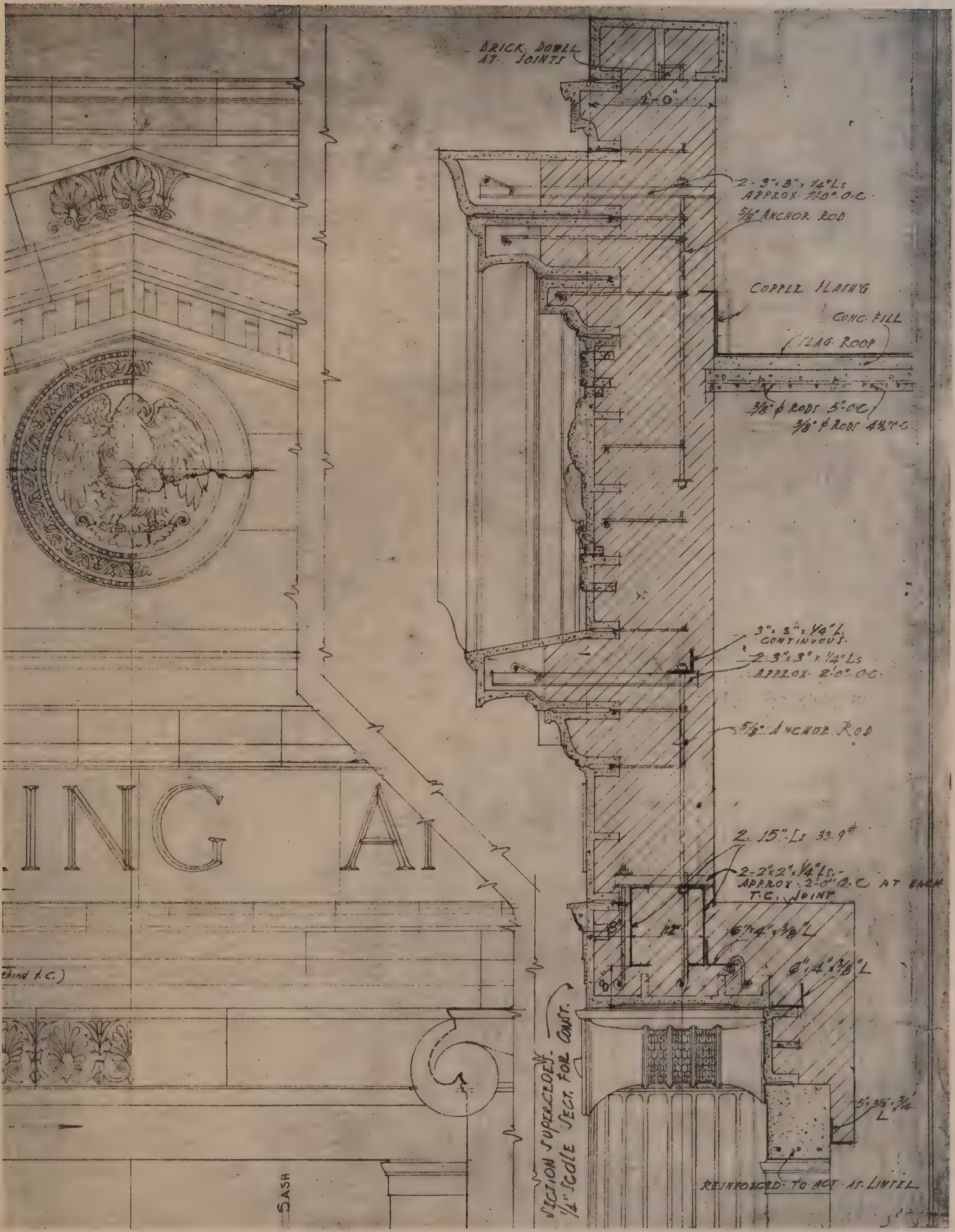
JOHN A. GURD, Architect, 101 Park Avenue, New York City, resident of River Edge Manor, N. J., died at the Hackensack Hospital on Friday, June 20th, after an operation for appendicitis.

Mr. Gurd was a graduate of the Ecole des Beaux Arts. For a number of years Mr. Gurd taught design at Pratt Institute, Brooklyn, New York. During the war he was connected with the Y. M. C. A. in their hut building work. After the war Mr. Gurd deturned to private practice.

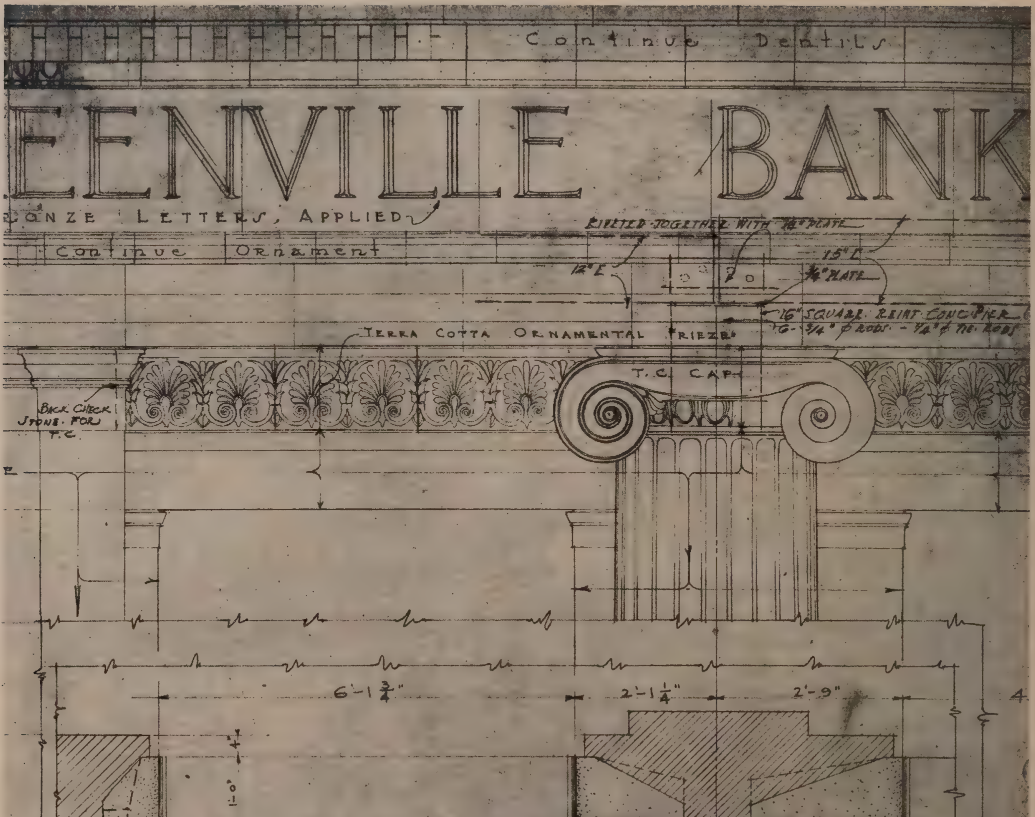
He is survived by a wife and four children.


GREENVILLE BANKING A
REFLECTED PLAN OF SOFFIT & CAP
SECTION THRO' SIDE BAYS
Intersection of Bldg Lines
PLAN
SECTION THRO' CENTER
DETAIL OF OCEAN AVE. ELEVATION
101
GREENVILLE BANKING & TRUST COMPANY
GREENVILLE N. J.

Details of Construction—Building for the Greenville Banking and Trust Company, Greenville, N. J. Alfred C. Bossom, Architect. See large details on pages 61 and 62.



Details of Construction, at Actual Size of the Original Drawing. Building for the Greenville Banking and Trust Co., Greenville, N. J. Alfred C. Bossom, Architect.



Details of Construction, at Actual Size of Original Drawing. Building for the Greenville Banking and Trust Co., Greenville, N. J. Alfred C. Bossom, Architect.

SAINT LOUIS ARCHITECTURAL CLUB

AMONG the many groups of people gathered in the concourse of the Union Station at nine o'clock on the morning of July 4th were the "pilgrims" from the St. Louis Architectural Club, about to entrain for Jefferson City, Missouri. The shrine of art towards which we were journeying was the State Capitol; and a large painted sign conveying that information was placed on each side of the special car which had been provided for the Club's party on the Missouri Pacific train. This model of the sign painter's art, done in red, white and blue, was the combined effort of Ray Leimkuehler, Dan Carroll and Charles Gray, who, as sign painters, are good architects.

The ride from St. Louis to Jefferson City consumes a little more than three hours, it being a distance of about one hundred and fifteen miles. Arriving at the Capitol Grounds, our party, thirty-five in number, proceeded to inspect the building under the guidance of the Custodian. First our attention was called to the sculptured pediment, by Sterling Calder; and next the huge bronze doors were the subject of comment.

Passing through the main doorway, we came immediately to the grand stairway, thirty feet in width. At the top of this stairway is the rotunda, with the four pendentives of the dome decorated with the beautifully colored murals from the studio of Brangwyn. The eye of the dome also contains a canvas by Brangwyn. The scale of the rotunda and dome, the pleasing color of the murals, and the detail of the bronze railing all combine to make this the most impressive feature of the interior, the part to which all visitors return after seeing the many other beautiful sections of this unusual building.

The Senate Chamber, with the mural panels by Richard Miller, is dignified and impressive, as one would naturally expect. Another feature of this room which we noted was the very interesting manner of handling the acoustic treatment, a fabric placed on the ceiling and walls in graceful folds and held in place with plastic ornament.

Across the corridor from the Senate is the House of Representatives, and that room held the interest of our party a little longer than did the Senate Chamber. The most interesting feature there is the huge mural painting at the back of the room representing Missouri at war. Since nearly all the younger members of the Club are ex-service men, to contemplate this graphic representation of a war-torn French village, with Missouri troops in the foreground, gave more of a Fourth of July thrill than all the noise of fireworks could have done.

While the paintings in the Governor's Reception Room were somewhat disappointing, the proportions of that oval room, the woodwork, and above all the beautiful view out across the Missouri River and the surrounding country are the features which give that apartment its distinction.

The lunettes in the corridor on the second floor, some twelve or fifteen in number, are filled with mural decorations representing the resources of Missouri and also scenes from the various wars in which Missourians have participated.

A climb to the top of the dome completed the tour of the building. Since our train for the return trip left Jefferson City at five o'clock, we had time left only for a leisurely stroll through the hilly streets of the town down to the railway station.

There was no particular excitement on the return trip. In fact everyone was tired, and willing to sit still and doze. Climbing hills and steps, and digesting so large a portion of architecture, painting and sculpture after a three hours' journey are efforts that would consume anybody's pep on a summer day. However the members of the party all expressed themselves as feeling well repaid for the trip and that the Fourth of July had been celebrated in the most fitting and beneficial way that Missourians could conceive. Missouri has honored the memory of Thomas Jefferson more than has any other State; and since the Fourth of July is not only the anniversary of the signing of his immortal Declaration of Independence, but likewise the anniversary of his death, the St. Louis Architectural Club feels that it has performed a patriotic duty and has also paid tribute to the first great American Architect. We also feel that the architects who designed this impressive Statehouse, Messrs. Tracy & Swartwout of New York, have handled their problem in a way that would entirely satisfy Thomas Jefferson."

PERSONALS

RALPH W. HAMMETT, holder of the Nelson Robinson Jr. Fellowship from Harvard, will sail some time in August for eighteen months of study and travel in Europe. Mr. Hammett was engaged as associate professor in architecture at Harvard during the last year.

WILLIAM H. KRAEMER, ARCHITECT and ENGINEER, has removed his office to 4157 West 5th Street, at Western, Los Angeles, Calif.

JOSEPH P. FLYNN has opened an office for the practice of architecture at 217 East Ave., Rochester, N. Y.

DANA R. WESTERMAN has opened an office for the practice of architecture at 335 East Broad St., Columbus, Ohio.

HOWARD H. HAHN, ARCHITECT, has removed his offices to Room 524, Madison Terminal Building, Chicago, Ill.

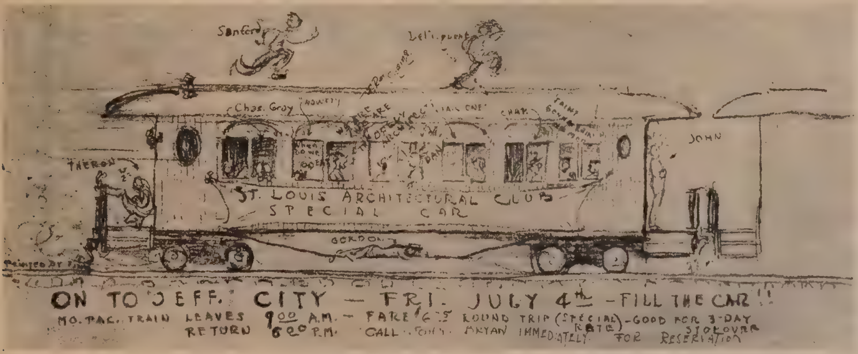
HENRY LA POINTE, ARCHITECT, has removed his office to 145 East Flagler Street, Miami, Florida.

ANTONIO DINARDO has become associated with William Koehl in the general practice of architecture. The new partnership will be known as Koehl and DiNardo, with offices in the Park Building, Cleveland, Ohio.

MAURICE PARIS, ARCHITECT, has removed his offices to 148-02 Hillside Avenue, Jamaica, L. I., N. Y.

CARL HARTZELIUS, ARCHITECT and ENGINEER, has removed his offices to 301 Madison Avenue, New York.

ANDREW C. JACK has opened an office for the practice of architecture at 5005 Euclid Avenue, Cleveland, Ohio.


Sanford
Chas. Gray
JOHN
THERON
DAN
GORDON
ST. LOUIS ARCHITECTURAL CLUB
SPECIAL CAR
ON TO "JEFF." CITY — FRI. JULY 4th — FILL THE CAR!!
MO. PAC. TRAIN LEAVES 9:00 A.M. — FARE 6.55 ROUND TRIP (SPECIAL RATE) — GOOD FOR 3-DAY STOPOVER
RETURN 6:20 P.M. CALL BRYAN IMMEDIATELY FOR RESERVATION

Announcement of Outing of the St. Louis Architectural Club.

Eugene Kennedy

EUGENE KENNEDY, winner of the Rotch Scholarship, was born in Brooklyn, New York, in 1904. He was educated in the public schools in Boston; left High School in his third year, at sixteen, and went into the office of Mr. E. B. Stratton as office boy, where he remained one year. After this he served one year in Mr. Guy Lowell's office, then one year with Mr. Charles Grece and a year and a half in the office of Mr. Richard Arnold Fisher. At the time of his winning "The Rotch" he had been with the firm of Maginnis and Walsh for about a year.

His advancement has been steady and consistant and his various moves were in the interest of such advancement. In fact Mr. Fisher predicted over a year ago that Mr. Kennedy would eventually be a strong Rotch contender. His whole course of architectural schooling has been through the courses maintained by the Boston Architectural Club for "after hours students," and, though a frequent winner of high mentions in Beaux Arts work and the conjunctive problems with Harvard and Technology students carried on at the Club through the cooperation of the architectural departments of these institutions, he is the first direct winner of the Club's school system alone. Eleven of the last nineteen winners of "The Rotch" have been products of the Boston Architectural Club Atelier, but in each of these cases the students have had the benefit of two years scholarship at Harvard or Tech, through a privilege formerly in existence but now abrogated. At the age of twenty, Mr. Kennedy is the youngest winner to date. He is a fine upstanding product of his own endeavor aided and guided by competent teachers, the Club is very proud of "Gene."

A SYSTEM FOR PRESERVING AND FILING REFERENCE MATERIALS

by Emil Ginsburger, Architect, New York City.

THE interesting discussion started in the February issue of Pencil Points and continued in subsequent numbers, in regard to this important phase of efficiency in the architect's office as well as among draftsmen prompts the writer to try to help such readers as are interested in this subject and who may have not fully developed a workable and elastic system, by describing the experience of many years in arranging architectural materials.

It is gratifying to note that some of the correspondents have been travelling in the right direction, having selected the Dewey Decimal System of Classification as their guide. They have no doubt found it, as did the writer, most simple and flexible, and adapted for ready expansion. It has been used by him as a labor-saving device, responsive to every need, during more than thirty-five years.

It is very evident that only a fraction of the good could be gotten from a library without catalogues to tell the librarian and readers what the collection contained on any given subject. In the same way, architectural publications become a useless mass of inaccessible material, often become an encumbrance in the office. Many a time has the writer seen a score of bound volumes spread on a table being ransacked, as it were, again and again, from cover to cover, in a vain search for some special illustration or other which has become imbedded somewhere among them. This procedure is provoking and expensive. This could be prevented if a little time were taken each day to classify in a logical way, suitable material as it comes to hand. There can be no objection to binding the text, but there is no practical justification for including plates in the same volume unless one wishes just to keep the bound volumes to fill shelves and to accumulate dust.

Away back in 1886, when the writer entered the ranks and his interest in his chosen calling became intense, the great need of conserving tracings of details and ornament, clippings from books, and magazines, architectural club catalogues, and even from the advertising pages, was soon apparent. For this purpose a loose leaf book, containing about 100 manilla sheets, thirteen inches by seventeen and one-half inches was selected. At first materials were pasted on both sides of the sheet; it was soon found that pasting on one side only was more practicable. As the sheets became filled, the volume grew to be too unwieldy and cumbersome. Accordingly the book was discarded and a system of loose sheets of the above size was adopted. These sheets, of whatsoever size adopted, should not be of manilla paper, but rather of a medium weight bond paper, so that the edges may remain permanent, firm, and not discolored and brittle with age.

As the sheets began to multiply and the writer's system of classification did not seem to meet his needs, he became acquainted with the Dewey System of Decimal Classification published by the Library Bureau. It is now generally used in libraries.

This system was found to be a revelation. Having so simple and useful means at hand, the collection grew apace so that it includes some 1200 or more sheets, or approximately 12,000 items. Reproductions of some of these sheets are shown elsewhere in this number of Pencil Points. (*See page* 66.) Of course, these sheets only include comparatively small cuts and details of design in general. Large plates are taken care of in a filing case in the same manner.

An extension of the Dewey System of Classification as applied to architecture and design in general, and suitable to an architect's needs has been developed by the writer who hopes to publish it in the near future.

The work or rather the pleasure of classifying architectural materials will not only become a valuable asset to the office, but has also its cultural value; it systematizes draftsmen's knowledge of forms and styles, and awakens a keener and broader interest in architecture and design.

The Dewey Decimal Classification is founded on the division of the field of knowledge into nine main classes, numbered by the digits 1 to 9. Encyclopedias, Dictionaries, Periodicals belonging to no one of these classes, are given the mark 0, and thus form a tenth class. Each class is again divided into 9 divisions, general works belonging to no division number. Divisions are divided into sections, the process being repeated as often as necessary.

Thus, 729.5 means: Class 7 (Art), Division 2 (Architecture), Section 9 (Architectural Design & Decoration), Subsection 5. (Decoration in Relief).

The system really consists of two parts. One is the complete classification which unfolds, in proper order, all classes, divisions and sections, with all the subsections given under each section; the other is the index in which all heads of the table are arranged in one simple alphabet, with the class number of each referring to its exact place in the preceding table.

Examples of these are given below.

CLASSIFICATION LETTER A

Abattoir	725.23
Abbeys	726.11
Academics	727.2
Acanthus Leaf	729.5121d
Acroter	729.522d
Adams Style	724.25
Administration Buildings	725.1
Africa N. Mohammedan	723.36
Aisle	726.571
Alabaster	729.531a5
Alcazar Moorish	723.352
Alhambra Moorish	723.351
Altar	723.351

and so on.

INDEX

726.52	CITY CHURCHES
726.52P	Plans
726.521	Frame
726.522	Stone
726.523	Brick
726.524	Partly Masonry
726.53	COUNTRY CHURCHES
726.53P	Plans
726.521	Frame
726.522	Stone
726.523	Brick
726.524	Partly Masonry
726.6	CATHEDRALS
726.6a	American
6b	English
6c	French
6d	German
6e	Italian
6f	Spanish
726.7	MONASTERIES
726.71	Abbeys
726.72	Convents
726.73	Ecclesiastical Dwellings
726.8	MORTUARY
81	Cemetery Chapels
82	Memorial Chapels
83	Vaults
84	Tombs

PARIS PRIZE AWARDED

THE Paris Prize of the Society of Beaux-Arts Architects has been awarded to Harry Kirt Bieg, twenty-four years old, a student of the Armour Institute of Technology in Chicago. This was the seventeenth award of the prize and the first time it has gone to Chicago.

The following is a report of the Committee:

"The Committee on the Paris Prize announces the results of the Final Competition for the 17th Paris Prize of the Society of Beaux-Arts Architects.

JUDGMENT:—July 15th, 1924. *SUBJECT:*—A Transportation Institute. *JURY OF AWARDS:*—W. A. Delano, R. M. Hood, B. W. Morris, E. S. Hewitt, E. F. Sanford, Jr., W. M. Kendall, G. Lowell, H. Van B. Magonigle, D. E. Waid, A. L. Harmon, R. H. Pearce, and H. O. Milliken, Chairman.

AWARDS:—PLACED FIRST AND FIRST MEDAL: —Harry K. Bieg, Edmund S. Campbell, Patron, Armour Institute of Technology, and Chicago Atelier, Chicago, Illinois. *PLACED SECOND AND SECOND MEDAL:* —Samuel R. Moore, Columbia University and Atelier Hirons, New York City, N. Y. *PLACED THIRD AND SECOND MEDAL:*—Percival Goodman, Atelier Licht, New York City, N. Y. *PLACED FOURTH AND SECOND MEDAL:*—Elmer L. Babitsky, Atelier Wynkoop-Seymour, New York City, N. Y. *HORS CONCOURS:* —Andrew F. Euston, Atelier Hirons, New York City, N. Y.

DONOR OF PRIZE:—The Paris Prize Committee, Inc. *EXHIBITION (FREE TO THE PUBLIC):*—At Beaux-Arts Institute of Design, 126 East 75th Street, New York City, from July 16th to July 26th, inclusive (except Sunday),—9 A. M. to 9 P. M."

THE DRAFTSMAN WITH A JOB

FROM a reader we have received the following letter:

"I was much interested in your article 'The Draftsman with a Job.'

"It seems to me that there are only two ways for an architect, without private means, to establish himself in practice. One is to do work 'on the side' and the other is to save enough out of his pay envelope to keep things going until his practice is established. The first is dubbed by many architects 'pernicious practice' although many of them would not be practicing if they had not done work 'on the side' themselves. The second way will not be possible for the majority at the present rate of remuneration. I believe I am a fair draftsman, having a good knowledge of architectural design and architectural engineering; yet, after twenty-six years of experience and study I find myself earning the magnificent salary of $40.00 per week. I have never undertaken work 'on the side' but I regret now that I did not do so years ago.

"A draftsman should not rob his employer of his clients, but if he can obtain a connection which will eventually enable him to practice, he should not be discouraged."

THE SMALL COUNTRY HOUSE.

THE requirements of prospective owners of small country houses are set forth and a design based on these requirements is presented in an article "Here's the House" by F. W. Ives, Farm Engineer in the August *"Farm and Fireside,"* published by The Crowell Publishing Co., 381 Fourth Ave., New York City.

Letters from a large number of readers of that journal were taken as a basis for study, a score sheet was made on which were entered the requirements in order that the points mentioned most frequently might be determined. The resulting analysis shows what is probably a fairly close approximation to the requirements of people who want to build small country houses and the article is well worth reading for this reason.

THE SKETCH COMPETITION.

SKETCHES are beginning to come in for the PENCIL POINTS SKETCH COMPETITION for 1924. Now is the time to make sketches and send them along. By giving due consideration to matters of pictorial composition, by studying for a good arrangement of lines, of masses and of spots of light and dark, etc., and by giving thought to the technique, the sketches that one makes for the sake of studying the architecture of buildings can be given the pictorial qualities that go a long way toward making a successful sketch. Read the conditions of the Competition, the program may be found on page 106 of the June issue of PENCIL POINTS or a copy of the conditions will be mailed free on request addressed to PENCIL POINTS.

MASTER DRAFTSMEN, IV

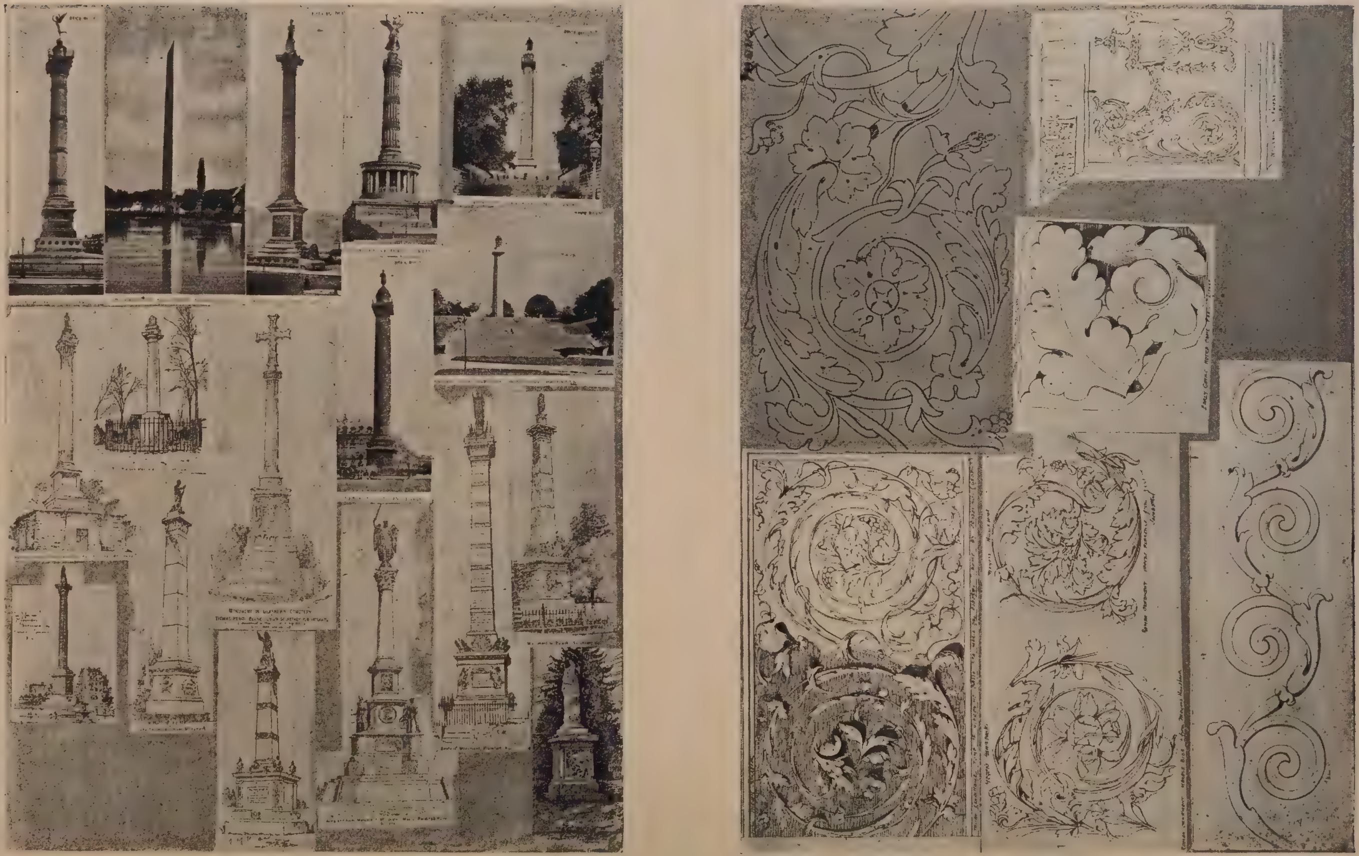
(*Continued from Page* 57)

ocean waves and rocks; waterfalls and brooks; Chinese ships; ladies from everywhere and architecture from the same places; ruins in Italy; trees in California and France. Everything beautiful interests him, and he draws it with facility and loves to do it.

While it is chiefly as an architect and designer that Mr. Mullgardt is known, his work as a draftsman, particularly in the field of open-air sketching, is so full of qualities of imagination, romantic composition and spirited action as to justify a high rank among the modern masters of that craft.

FRANCIS S. SWALES.

A READER, Paul H. Smith, Wichita Kansas, sends in a blue print designed to fit the average note book and we have made a reproduction which does not show it perfectly, but which does give a general idea of the subject. Useful notes of this sort are desired for our "Here and There and This and That" department. Any little thing that some fellow has worked out that helps him let's give to all the rest of the family. See page 71.



Sheets of Reference Material from the Files of Emil Ginsberger.
(*For system of filing, see text on page* 64)

Architectural Model with Cycloramic Background, by J. Bradbury Minott, Second Year Architectural Class, Pratt Institute. A. L. Guptill, Instructor.

ARCHITECTURAL EXPOSITION

OF GREAT importance and interest to the profession, the building industry in general and to the public, will be the Architectural and Allied Arts Exposition to be held in New York under the auspices of the American Institute of Architects and the Architectural League of New York, jointly. The opening of the Exposition will coincide with the opening of the Convention of the A. I. A., April 20, 1925, and the Exposition will continue for two weeks from that date. The place will be the Grand Central Palace, where several floors will be occupied by the Exposition.

The work of preparation has been going on actively for two months or more and is being carried forward vigorously, so it is assured that no pains will be spared to make this Exposition a realization of the intention of the A. I. A. and the League. D. Everett Waid, President of the A. I. A., is Chairman of the General Committee; Harvey W. Corbett, President of the Architectural League of New York, is Chairman of the Exposition Committee; Charles H. Green is General Director; Walter T. Sweatt is Director of Exhibits. Howard Greenley is Director of Decorations, and effects may be expected that will equal the standard set by Mr. Greenley in his great work for the "Ball of the Gods" of the Society of Beaux Arts Architects at the Astor years ago, his more recent direction of the Pageant that attended the presentation of the gold medal of the A. I. A. to Henry Bacon on the steps of the Lincoln Memorial at Washington and the notable work he has done for various expositions in the past few years.

The Architectural and Allied Arts Exposition will exert a beneficial influence throughout the country. It is a thing that concerns architects and all others identified with the building industry everywhere. It is under the direction of a national organization, the A. I. A., as well as of the League. Many able men are giving their best effort as officers and members of committees and they should have the co-operation of the profession in general to develop all the possibilities of the plan for this great Architectural and Allied Arts Exposition.

THE ARCHITECT'S LAW MANUAL

UNDER the title "The Architect's Law Manual," the publishers of PENCIL POINTS have just brought out a book that is intended to give readily a grasp of the legal aspect of the practice of architecture and to serve as a ready reference when questions of a legal nature arise in the architect's office. It is not intended to make the architect his own lawyer, but it is safe to say that the information it contains will often prevent the architect from getting into a position to need a lawyer, and will enable him to know in time when he does need to call in legal counsel. It is a readable book, as it is intended to be read and it is so indexed that any point can be looked up without difficulty, as it is intended as a reference book. It is clear, concise and orderly in arrangement. It is a good book for the student.

The author of this book is Clinton H. Blake, Jr., A.M., L.L.B., who is well qualified as an authority on his subject, through the experience he has gained in his extensive practice in this particular field. Mr. Blake is the author of several works on law in its relation to architecture and building and has taught the subject for a number of years.

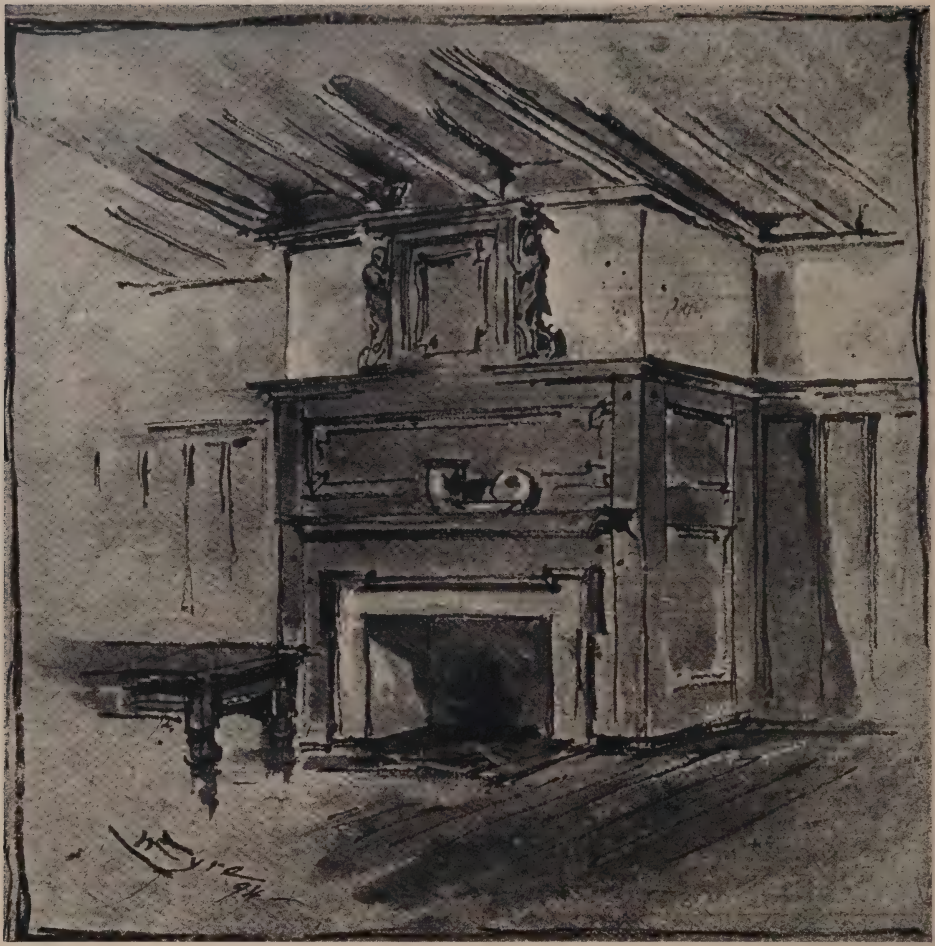
The contents includes chapters on The Business Side of Architecture, The Contract Between Architect and Client, The Contract Between Owner and Contractor, Representations or Guarantees with Respect to Cost, Acting as Contractor or Principal, Sketches and Plans, The Title to the Plans, Supervision, Competitions, Dealings with Corporations and with the Government, The Lien of the Architect, The Registration of Architects, The Architect as Agent, Termination of Architect's Employment, Legal Don'ts for Architects.

The book consists of two hundred fifty pages, is bound in library buckram and the price is five dollars.

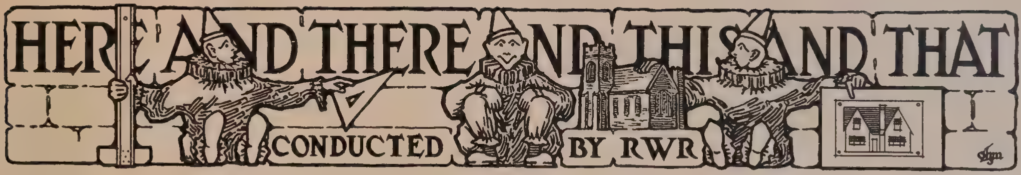
BECK 20
Silence on the Mall Central Park

Pencil Sketch by Martin Beck.

Design for Textile by Julia Black, First Year Design Class, Pratt Institute, Mary Starr Taylor, Instructor.



Water Color Drawing by Wilson Eyre.


HERE AND THERE AND THIS AND THAT
CONDUCTED
BY RWR

WELL, here we are with a brand new heading for this department! The response to the little competition we announced has been most gratifying, 25 designs having been submitted. The one awarded first prize, reproduced above, was contributed by Mr. George H. Mertens, of Buffalo. We feel that he has caught unusually well the spirit of this column, which may be described as a combination of the serious and the frivolous. There is a lighter side of life even in the practice of architecture and this is just the place for us to relax and give expression to it. Who shall say that fun is not just as important to us all as any of the other ingredients going to make up an eight hour day? Our congratulations and thanks to Mr. Mertens.

Ruth W. Rogers, Shreveport, La., was placed second, William Puddington, Battle Creek, Michigan, third, and John P. Morgan of Pittsburgh fourth. Other designs deserving special mention were submitted by, T. A. Hartman, Chicago, Louis Michael, New York, Anthony Hartig, Brooklyn, Stephen D'Amico, Jr., New Orleans, and M. K. McQuarrie, Kentville, N. S.

As a matter of fact practically all of the designs possess considerable merit and we thank all of those who competed for the interest they have taken and the time they have spent.

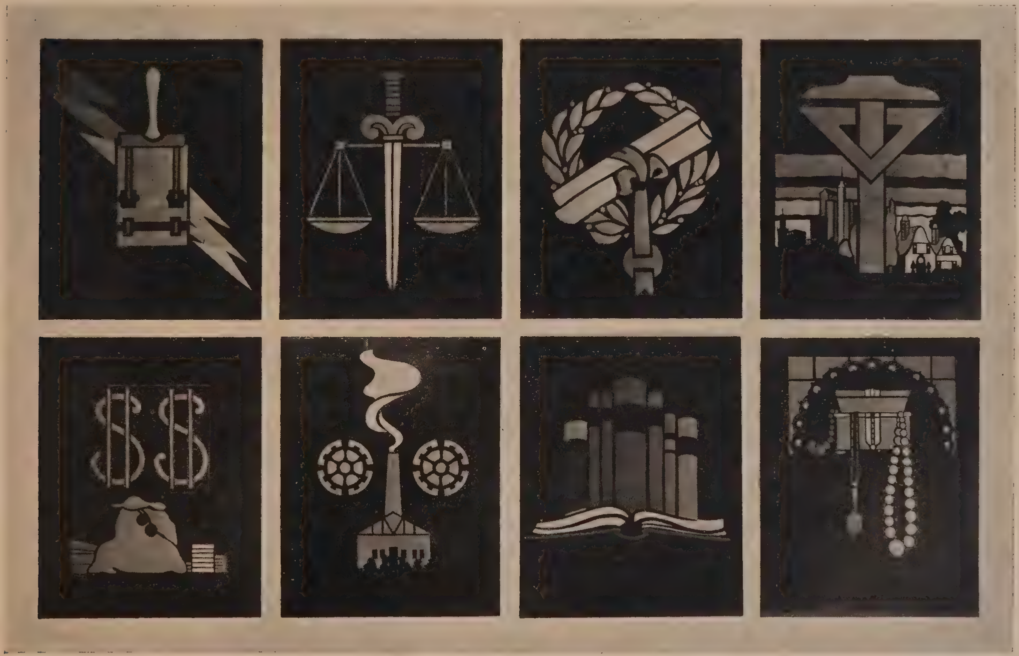
WE recently spent a couple of days in Pittsburgh and had a grand time. All the architects and draftsmen we saw liked PENCIL POINTS and enjoy this department (maybe they did not mean it but they came through in great shape). And we spent a most enjoyable evening at one of the monthly meetings of the Pittsburgh Architectural Club, where we found a splendid spirit of good-fellowship which cannot help but result to the advantage, not only of the members, but also to the city where such an organization exists.

Now why can't we have more good architectural clubs? We look over our subscription list and see in many places a considerable group of PENCIL POINTERS in which, so far as we know, there is no organization or meeting place for the architects and draftsmen. So much in the way of enjoyment and practical helps are possible that it seems too bad that more clubs are not organized.

Let's start something! Anyone interested is invited to get in touch with us as a preliminary step. We will furnish copies of by-laws of successful clubs, lists of architects and draftsmen in the various communities and some suggestions for getting things going. Exhibitions of various kinds can be held during the winter months, competitions can be arranged, and, in the summer, picnics with roast corn, watermelon and even broiled chicken are possibilities.

ONCE more we have an opportunity to thank the Lady from Minneapolis, Ruth L. Gerth, for an interesting contribution to this department. The above engraving shows small reproductions of eight transparent lighted posters designed by Mrs. Gerth for the Woman's Activities Exhibit recently held in Minneapolis. The exhibits were grouped according to their character and above each booth one of the posters, size 22 x 28, appeared. The reproductions of course do not show the colors.

Now why don't some of the other talented girls who read PENCIL POINTS send along some contributions? You are as welcome here as the flowers of May!



Posters designed by Ruth L. Gerth, for the Woman's Activities Exhibition in Minneapolis.

HERE is a little item contributed by a reader either too modest or too shy to disclose his identity.

In writing specifications do not say "as shown on the plans" or refer to the "plans and specifications" because here is how the legal fraternity look at it.

Lawyer to witness:— You say the building does not correspond or agree with the plans. Will you point out one discrepancy?

Witness:— The plans call for 2" x 12" floor joist and the contractor put in 2" x 8".

Lawyer:— Will you please point out on the plan where the 2" x 12" floor joist are called for?

Witness:— (Takes roll of plans and points to required place) Here . . .

Lawyer:— But that is not a plan, that is a section

MR. EDWARD B. LEE, Chamber of Commerce, Pittsburgh, would like to secure copies of PENCIL POINTS for January, February and April 1921 to complete his files.

Mr. Thos. A. Fahey, 4945 Walnut St., Philadelphia, Pa. needs a copy of March 1922. In exchange he offers either June 1920 or February or March 1921.

Mr. G. E. McDonald, Jr., 141 East Broad St., Columbus Ohio, can supply to anyone requiring them June, August and September 1920.

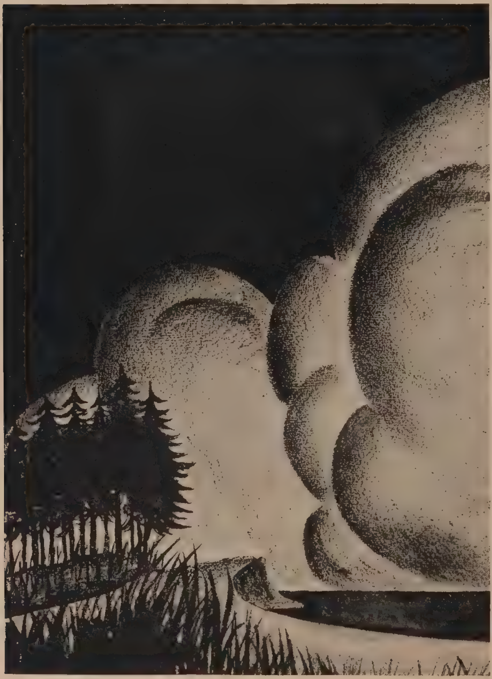
Mr. Birch D. Eastwood, 613 Liberty National Bank Bldg., Waco, Texas, wants copies of January, February March and April 1922.

Mr. George Ruhl, 2928 Dumaine St., New Orleans, La. desires copies February, March, April, May, August and September 1921.

Mr. Andrew Adorno, Box 87, Portland, Conn. would like to purchase PENCIL POINTS complete.

Mr. W. Langcake, 109 Grove Lane, Denmark Hill, London S E 5 is anxious to secure a copy of PENCIL POINTS for December 1923.

HERE are a couple of interesting grotesque sketches done by Mr. Rudolf von Huhn at Ogunquit, Maine. Mr. von Huhn's work has received notable recognition from critics.



Sketch by Rudolf von Huhn.

Sketch by Rudolf von Huhn.

ARCHITECTURAL TENNIS TOURNAMENT

THE William Adams Delano Trophy for the Men's Singles has been secured and is now on exhibition in the display window of the Architects Samples Corporation, 101 Park Ave., N. Y. City.

In addition to this beautiful cup, the following prizes will be awarded: Gold Medal to the winner; Gold filled Medal to the other finalist; Silver Medals to the other two semi-finalists; Bronze Medals to the other four winners in the qualifying round. Details concerning these medals are being worked out by a Medal Committee composed of A. E. Watson (Donn Barber) chairman, A. M. Koch (P. V. Stout), D. M. Plumb (Walker & Gillette), J. H. D. Williams (Delano & Aldrich), and A. F. Darrin (Holmes & Winslow), ex-officio.

By special invitation of Mr. Delano, semi-final and final matches of this tournament will be played on Saturday, August 30th, on the courts at his estate at Syosset, Long Island. This invitation is extended to all contestants and to a limited number of guests. Suggestion has been made that a motor bus be chartered to convey the party there and back. How about it?

Complete Entry List for the 1924 Tournament.

BRONX	1	Val Kennedy	Dodge Reports
	2	F. M. Refert	Dodge Reports
	3	J. R. Colean	York & Sawyer
	4	R. De Joannis	Charles M. Hart
	5	A. R. Tron	F. L. Ackerman
	6	E. S. Marrotte	Walker & Gillette
	7	A. R. Stanley	Dodge Reports
	8	A. E. Watson	Donn Barber
MAN A	1	Paul Singer	Warren & Wetmore
	2	John Alger	Dodge Reports
	3	George Keyser	Schultz & Weaver
	4	M. W. Hopkins	Delano & Aldrich
	5	Max Zimmerman	Treanor & Fatio
	6	S. M. Palm	Kenneth Murchison
	7	R. E. Pfohl	Moran, Maurice & Proctor
	8	D. M. Plumb	Walker & Gillette
MAN B	1	Geo. A. Flanagan	Donn Barber
	2	Robert Searing	Delano & Aldrich
	3	H. M. Barone	Treanor & Fatio
	4	A. V. Bell	Dodge Reports
	5	S. A. Minoli	Arnold W. Brunner
	6	William Pennell	Alfred Hopkins
	7	(vacancy)	
	8	D. E. Soper	Holmes & Winslow
WEST.	1	A. M. Duncan	Walker & Gillette
	2	H. L. Barton	Helmle & Corbett
	3	W. S. Boice	York & Sawyer
	4	A. D. R. Cowley	Delano & Aldrich
	5	F. H. Crossley	York & Sawyer
	6	C. A. Minoprio	Carrere & Hastings
	7	T. E. McMullen	Delano & Aldrich
	8	L. I. Nichols	Delano & Aldrich
N. J.	1	W. E. Meissner	Delano & Aldrich
	2	G. A. Betschick	York & Sawyer
	3	H. C. Briggs	Dodge Reports
	4	J. Dodd	York & Sawyer

	5	S. R. Elder	Dodge Reports
	6	R. E. Goddard	Holmes & Winslow
	7	(vacancy)	
	8	C. E. Arnold	American Architect
BKLYN A	1	Heath W. Lawson	Dwight P. Robinson
	2	J. Cohen	Donn Barber
	3	A. F. Darrin	Holmes & Winslow
	4	M. C. LaBarr	Cornell Iron Works
	5	Wallace Herrick	George B. Post & Sons
	6	P. A. Nyholm	Penrose V. Stout
	7	(vacancy)	
	8	E. F. Stoeckel	John Russel Pope
BKLYN B	1	Albert M. Koch	Penrose V. Stout
	2	M. S. Dimmock	McKim, Mead & White
	3	H. A. Cartier	Moran, Maurice & Proctor
	4	J. H. D. Williams	Delano & Aldrich
	5	D. Darrin	Thompson—Starrett Co.
	6	T. L. Finlayson	Edward F. Fanning
	7	B. Moscowitz	York & Sawyer
	8	J. P. Otte	Delano & Aldrich
Q. L. I.	1	E. Sheppard	York & Sawyer
	2	N. W. McBurney	Peabody, Wilson & Brown
	3	C. J. Di Peri	Alfred Di Blasi
	4	M. Jaeger, Jr.	Delano & Aldrich
	5	M. R. Johnke	Dwight P. Robinson
	6	W. A. Delano	Delano & Aldrich
	7	(vacancy)	
	8	R. W. Sexton	American Architect

Four vacancies remain open, to which prospective players are invited.

A. F. DARRIN Secretary
949 Park Place Brooklyn

Old Temperance Hall, Geelong Victoria, Australia. by J. R. Wilson

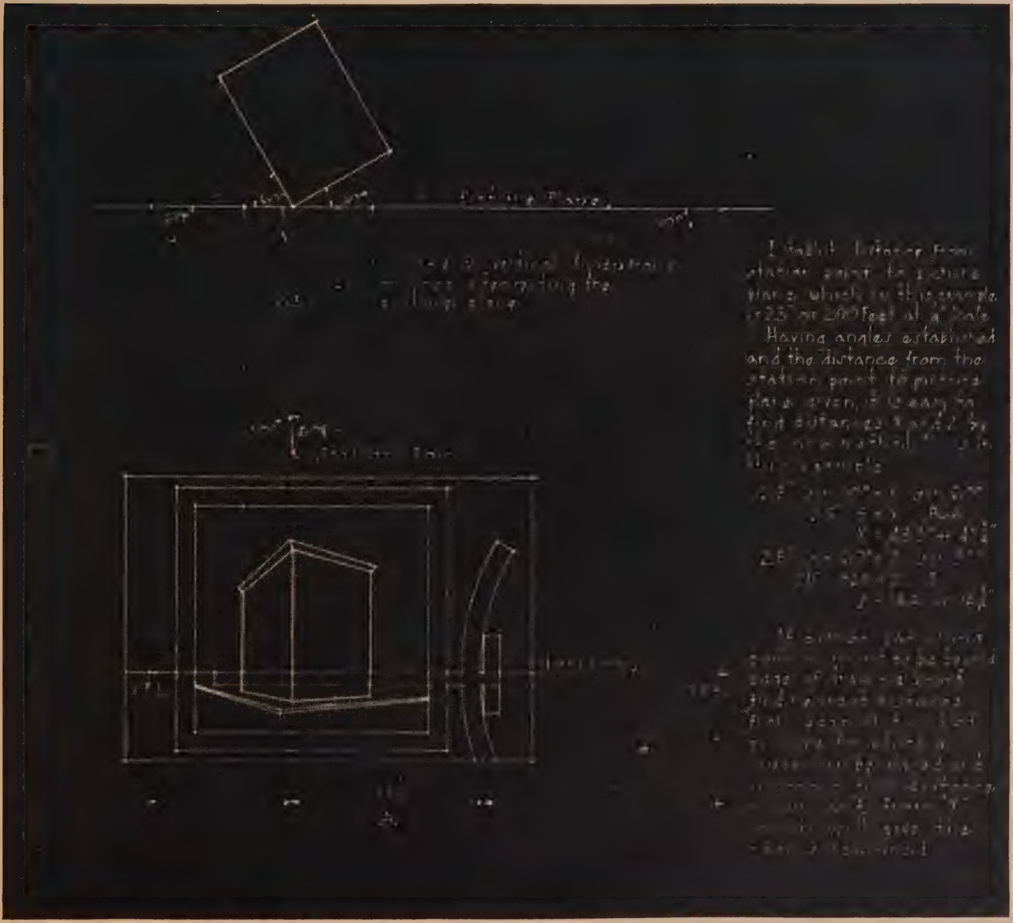


Diagram of Method of Drawing Perspectives, Contributed by Paul H. Smith, Wichita, Kansas.

The Student in the Office—Landing His First Job—R. B. Wills, Boston, with apologies to Briggs.

NEW YORK BOWLERS TO PLAY BASEBALL

SUMMER sports are the most difficult of all activities for any city club to take up, no matter how well organized it may be. However, it is a problem that must be met sooner or later if New York is going to have a club. At a recent meeting of the Executive Board of the Architectural Bowling League of N. Y. (which is organizing the movement for a club for architectural men) it was decided that baseball, being the most popular American summer sport, would be the best activity to branch into first.

In accordance with this, Mr. M. L. J. Sheffer, of James Gamble Rogers' Office, 367 Lexington Ave., was appointed Chairman of a Baseball Committee, with Mr. C. J. Jordan, of Alfred C. Bossom's office, 680 Fifth Ave., to assist him in a secretarial capacity. Mr. Sheffer, besides being a good Bowler, is a very enthusiastic Baseball Fan and we are very fortunate in having the unselfish co-operation of such a live-wire leader.

The following representatives were present at a meeting which the Chairman called in his office Wednesday, July 2nd:—

Warren & Wetmore	Mr. A. N. Griffin
Alfred C. Bossom	Mr. C. J. Jordan
McKenzie Voorhees & Gmelin	Mr. G. R. Paradies
Guilbert & Betelle	Mr. G. T. Forman
W. L. Stoddart	Mr. J. R. MacGuiness
Thomas W. Lamb	Mr. E. D. Thomas
Starrett & VanVleck	Mr. J. E. Quigley
George B. Post & Sons	Mr. W. E. Herrick
James Gamble Rogers	Mr. M. L. Sheffer Chairman

Messrs. Griffin, Quigley, and MacGuiness were appointed as a committee of three to draw up a schedule of games. A set of rules and regulations acceptable to the various representatives were adopted also. Many of the teams are now practicing and a number of games will have been played before this issue of Pencil Points is off the press.

Our hats are off to Messrs. Sheffer and Jordan for their efforts to further *Good Fellowship in the Architectural Profession.*

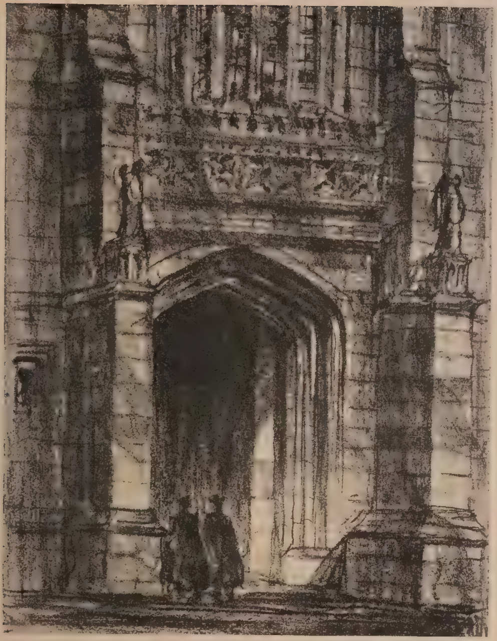
The Officers of the League wish to announce that they have secured the bowling alleys in the Hotel Shelton for the coming season. We shall have the exclusive use of these alleys three nights a week, together with the conveniences of this large and modern club hotel.

The Hotel Shelton will now be our Headquarters and all communications should be sent to N. T. Valentine, Secretary Architectural Bowling League of N. Y., Hotel Shelton, New York City.

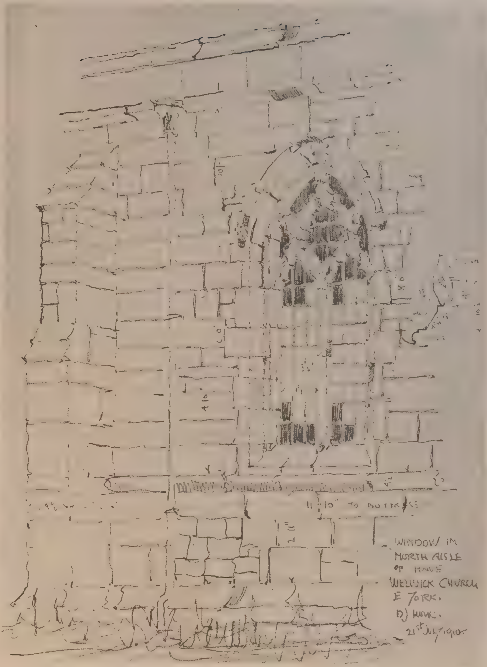
THE prize for the best contribution to the July number goes to Mr. Meyer Katzman, New York, for his sketch from a window in George B. Post's Office.

HERE is a nomination for the champion architectural family of the Universe—The Orlopp Brothers of California—six of them, Paul, Harry, Don, Stanley, Gene and Ward, all architectural draftsmen. Any other entries for first place in this event?

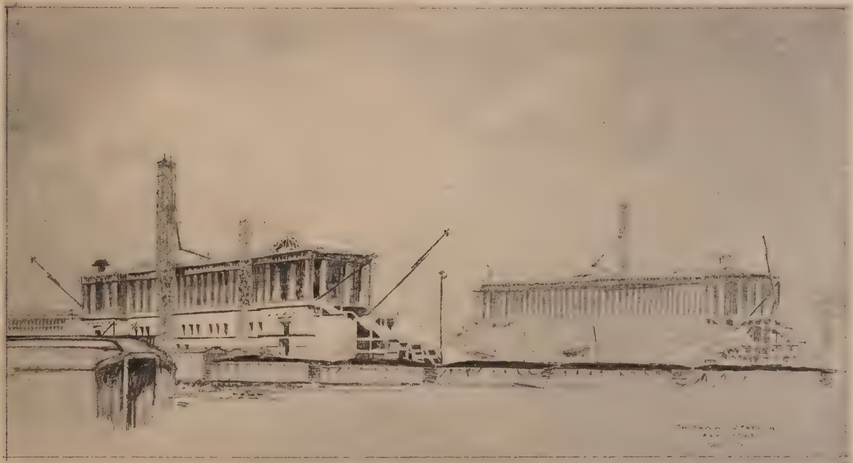
GLAD to see work from Australian PENCIL POINTERS. What's the matter with good old England? We have lots of readers there but they do not send us their stuff. Maybe some bold and venturesome draftsman from London or Liverpool, Edinburgh or Glasgow or somewhere else will throw conservatism to the winds and let us look at some of his sketches!



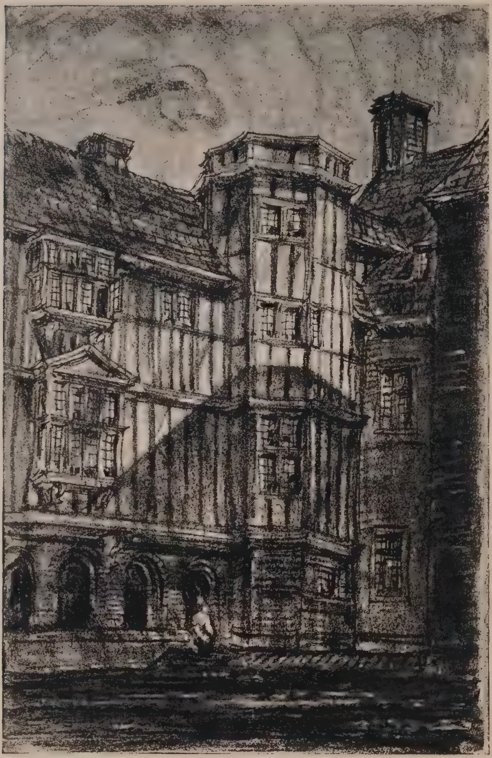
Sketch by James Francis Keally, Oxford.


11' 10" TO BUTTRESS
WINDOW IN NORTH AISLE OF NAVE WELWICK CHURCH E YORK.
D J MOIR.
21st JULY 1910

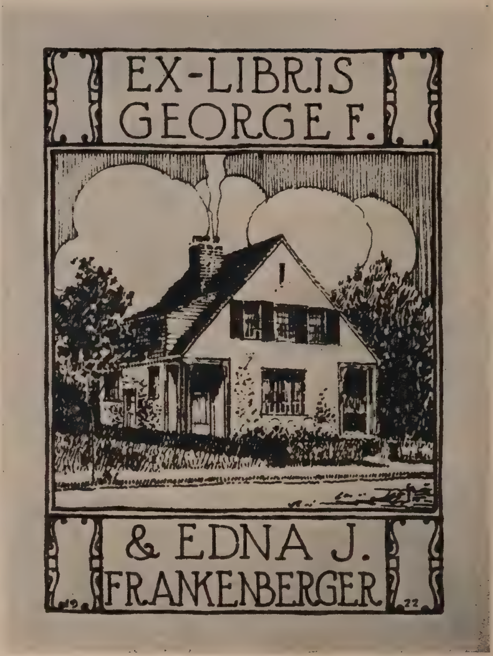
Sketch by D. J. Moir, Window in Welwick Church, East York.



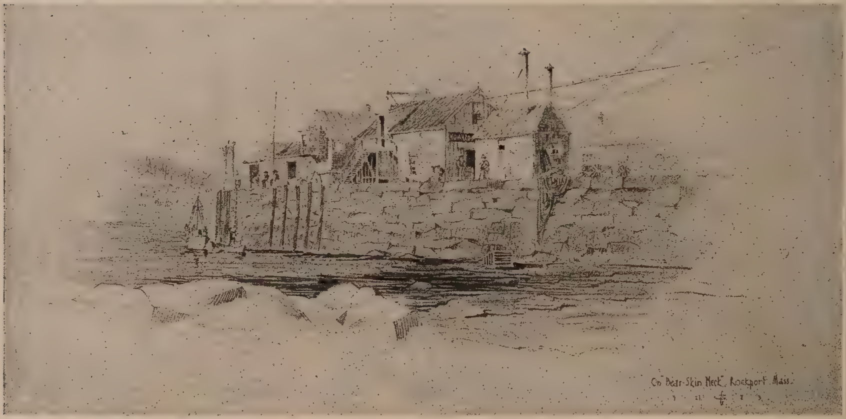
Sketch by Robert A. Crombie, Grant Park Stadium, Chicago.



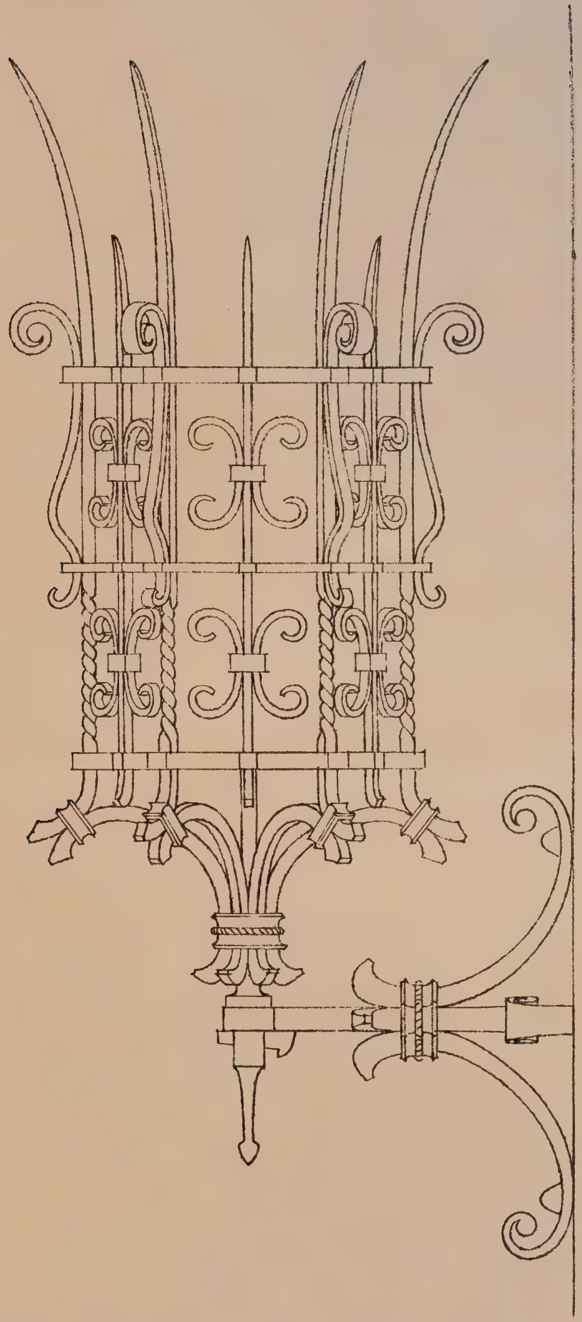
Sketch by James Francis Keally, Cambridge.



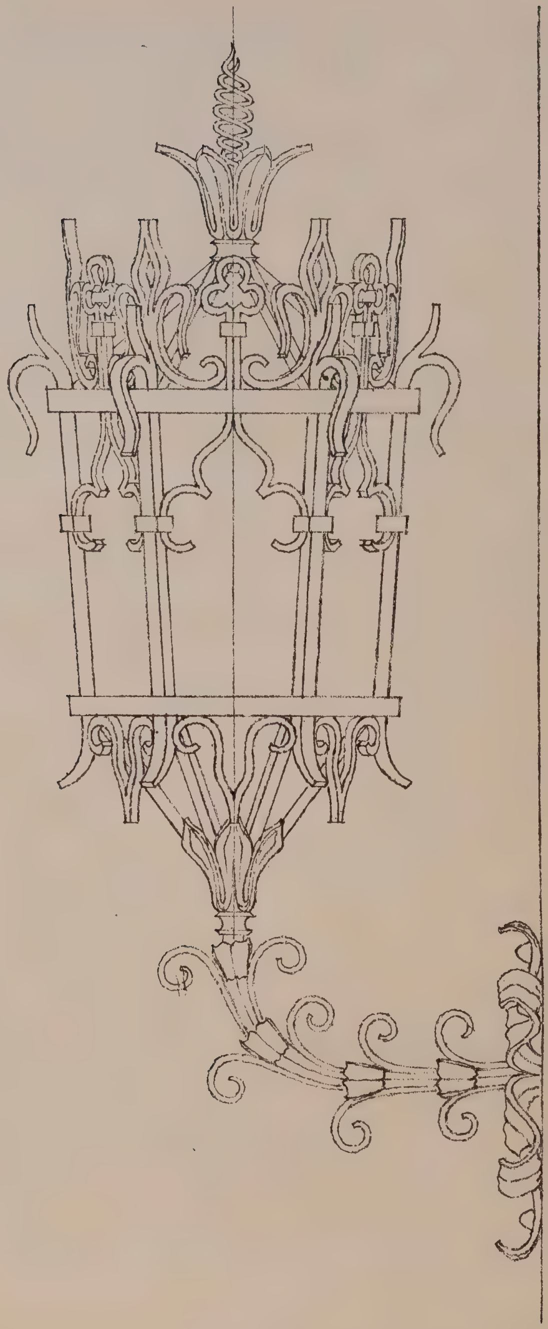
Book Plate Used by Mr. and Mrs. Frankenberger in Their Books. The Sketch is of Their Home.


On Bear-Skin Neck, Rockport. Mass.

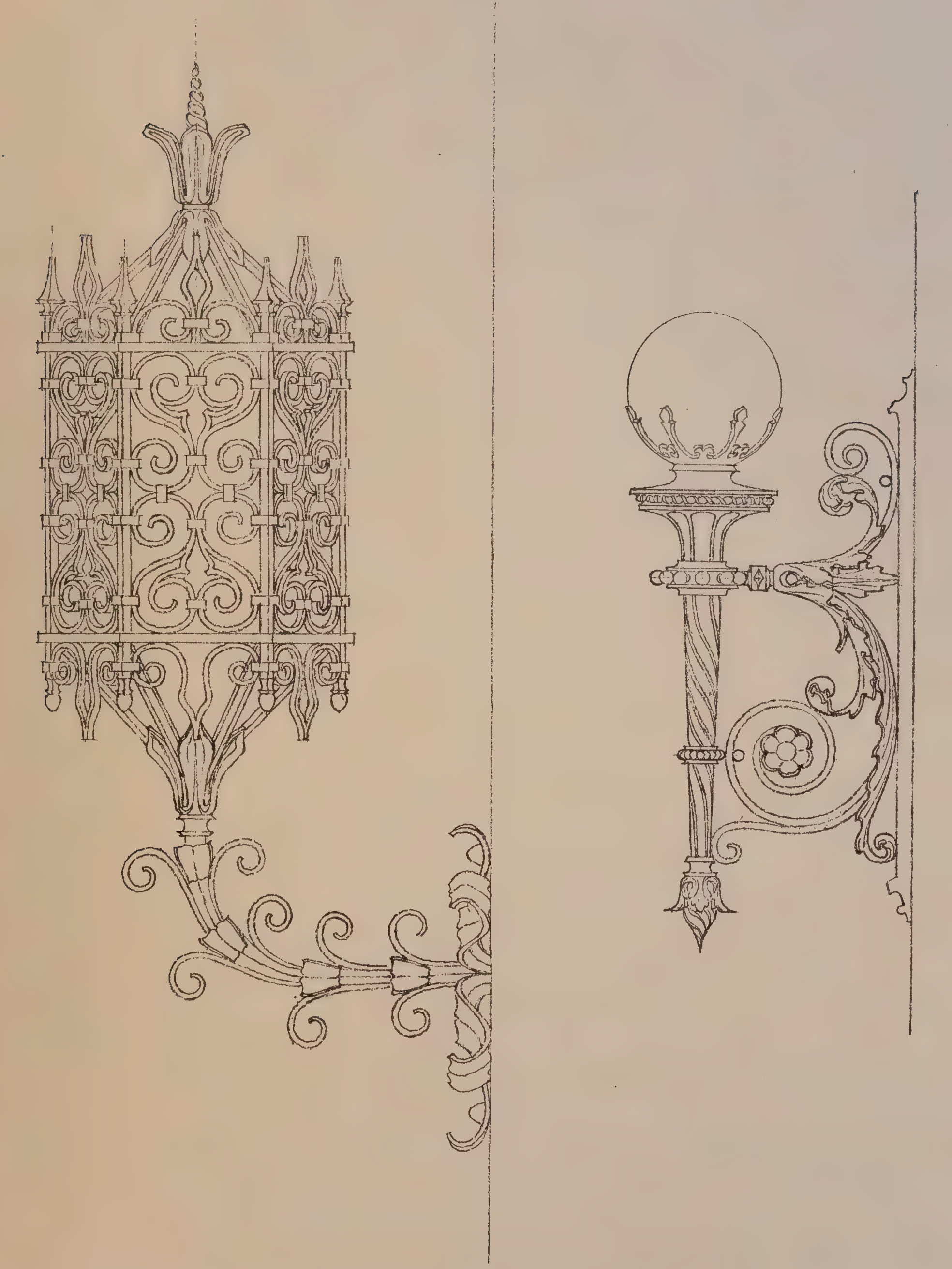
Sketch by Kenneth Geerlings, "On Bear Skin Neck," Rockport, Mass.



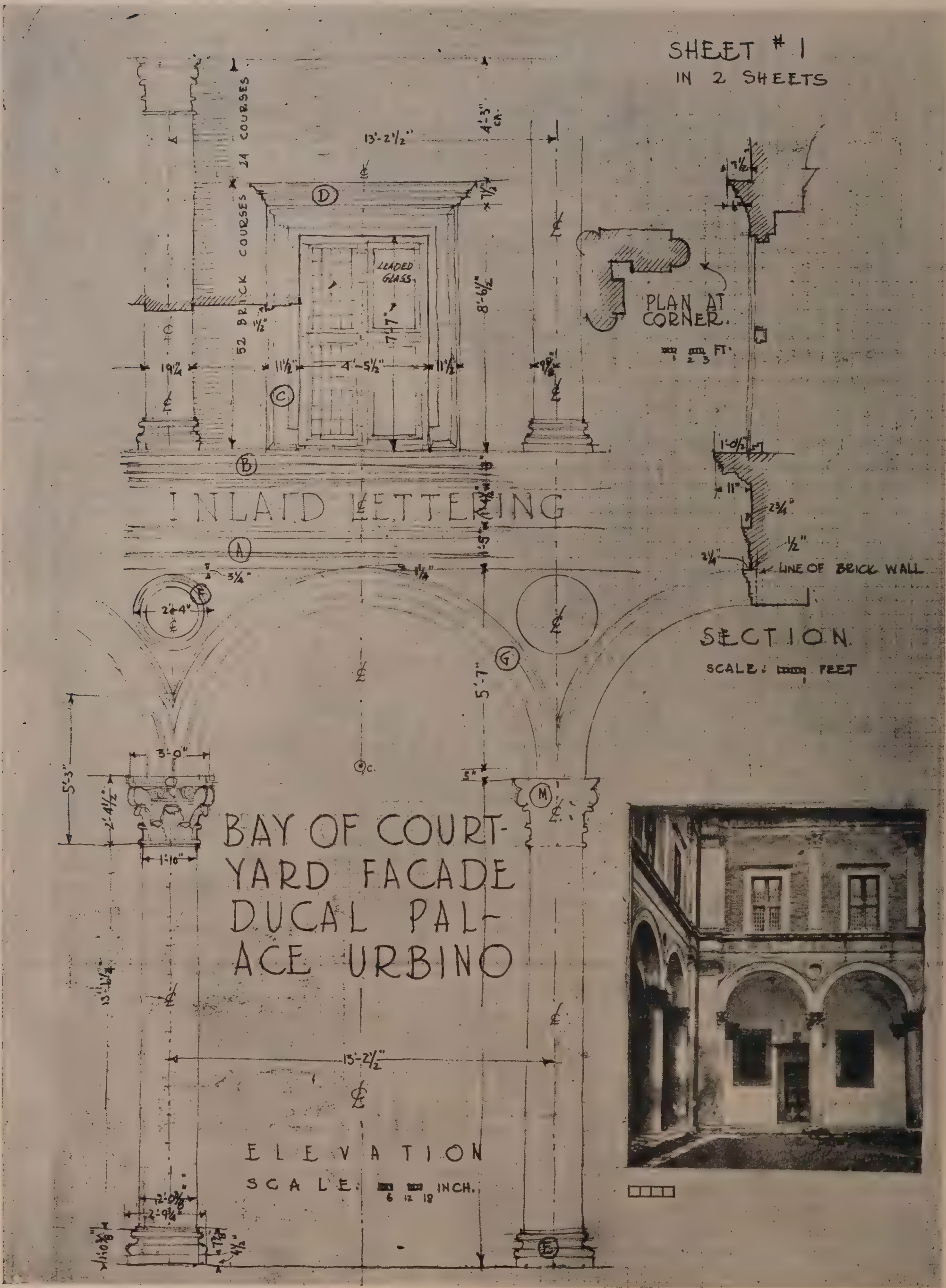
Design for Wrought Iron Lanterns at Main Entrance, Home of George W. Vanderbilt at Biltmore, N. C., Hunt & Hunt, Architects. Reproduced at the Exact Size of the Original Drawing, Scale 1½ in. = 1 ft.



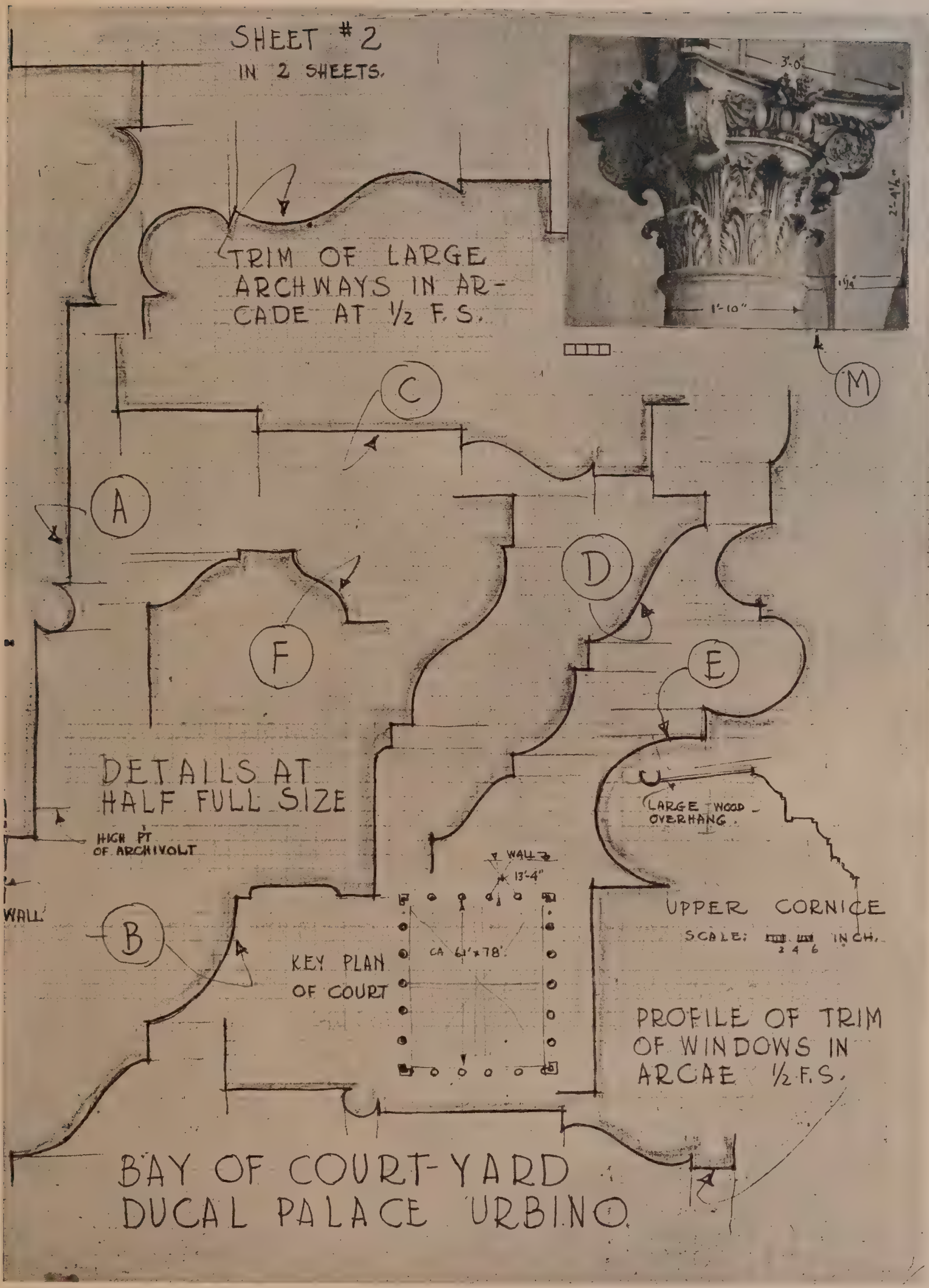
Design for Wrought Iron Lanterns of West Loggia, Home of George W. Vanderbilt, at Biltmore, N. C. Hunt & Hunt, Architects. Reproduced at Exact Size of the Original Drawing, Scale 1½ in. = 1 ft.



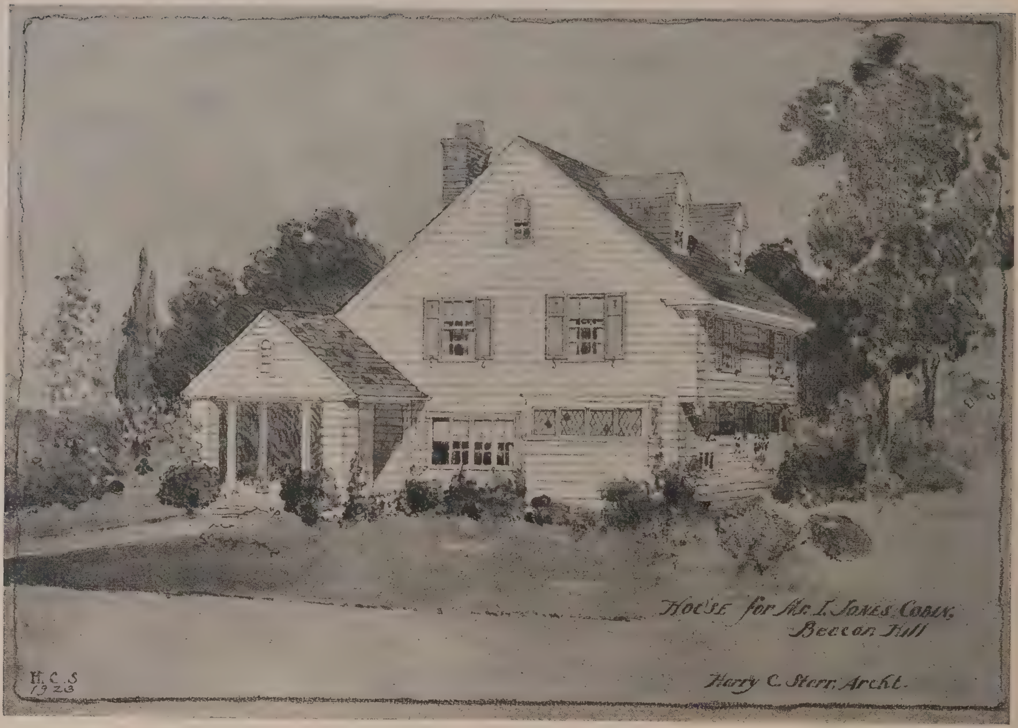
Designs for Metal Work for the Home of George W. Vanderbilt, at Biltmore, N. C. Hunt & Hunt, Architects. At the left, Design for West Loggia Lanterns, scale 1½ in. = 1 ft. At the right—Design for Lanterns at Main Entrance, scale ¾ in. = 1 ft.



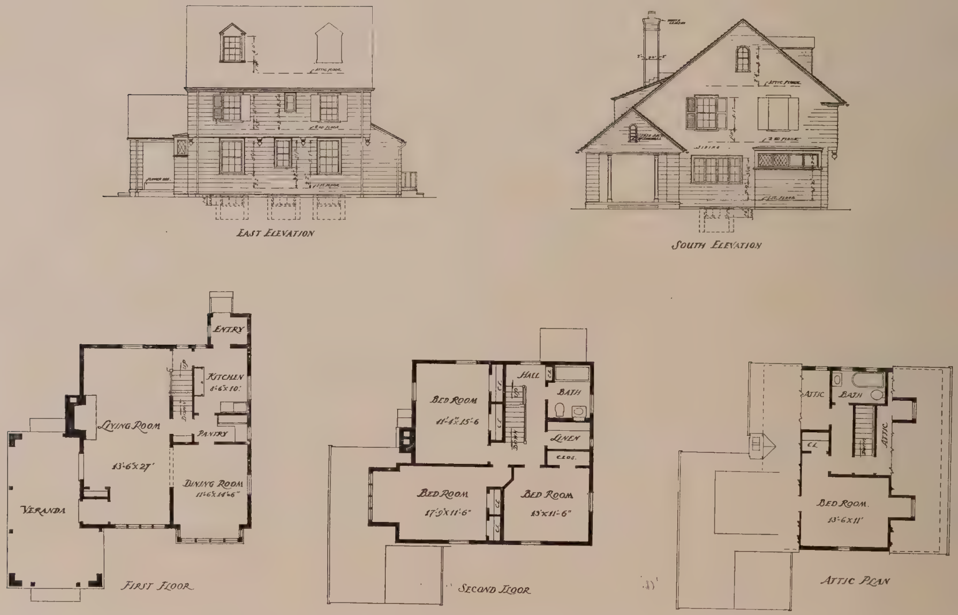
Bay of Court-Yard Façade, Ducal Palace, Urbino. Measured and Drawn by Ernest A. Grunsfeld, Jr.



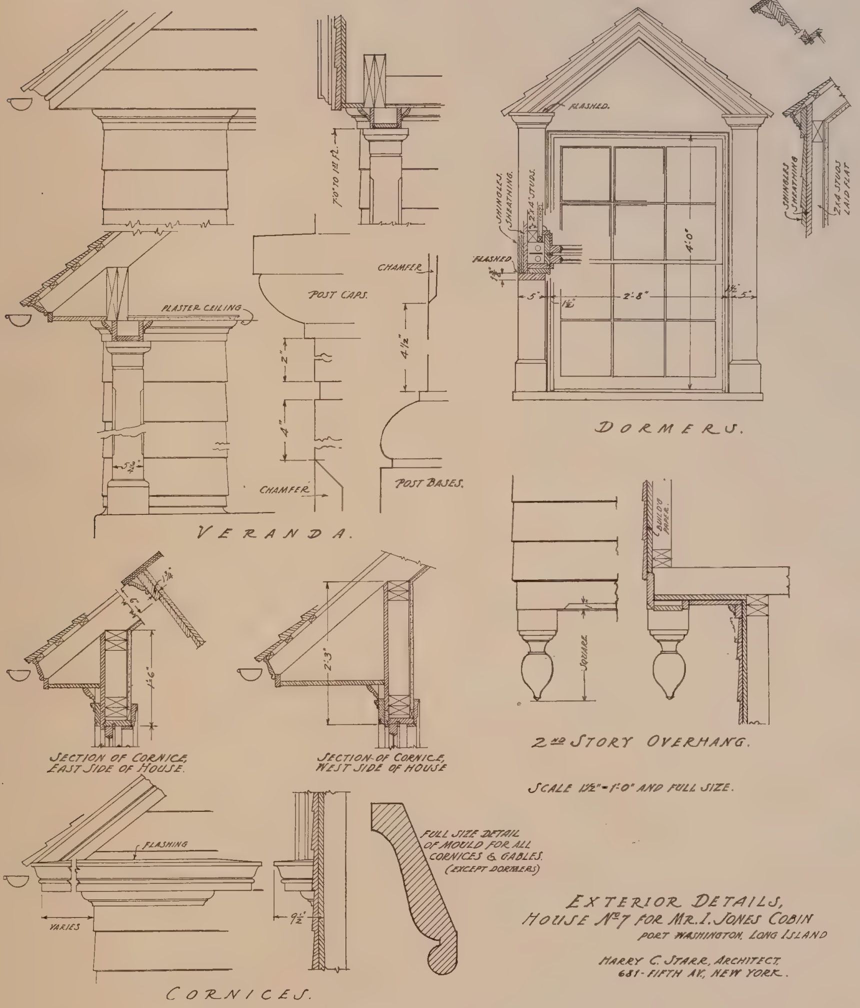
Bay of Court-Yard, Ducal Palace, Urbino. Measured and Drawn by Ernest A. Grunsfeld, Jr.



Rendering by Harry C. Starr.



House for Mr. I. Jones Cobin, Beacon Hill, Port Washington, L. I. Harry C. Starr, Architect.



Construction Details. House for Mr. I. Jones Cobin,
Henry C. Starr, Architect.

THE SPECIFICATION DESK

A Department for Specification Writers

MISCELLANEOUS ITEMS OF CONSTRUCTION PART XXI

By Otto Gaertner

In this series of notes Mr. Otto Gaertner, A.I.A., Associate Member American Society of Civil Engineers, is treating of a number of the minor matters of construction that are troublesome unless the architect happens to have met a similar problem previously—matters of a more or less special nature.—Ed.

(*Garages, continued*)—Stairs and elevators should be enclosed in fireproof towers with the openings protected with stationary or automatic self-closing fire windows and standard self-closing fire doors. They should be covered by approved skylights and the walls should extend above the roof. If they are enclosed in brick towers and the towers are not standard there would probably be a charge of five cents per hundred dollars added to the basic insurance rate. If plank floor construction is used with self closing doors there would also be an extra charge of five cents and if the doors and other details were not of the standard requirements there would be an extra charge of ten cents. There is also an extra charge of ten cents whenever the shaft or well is an open one. We have previously treated of the proper construction for stairwells and elevator shafts. The more fireproof they are the better.

There are some items which do not come under construction but which are charged for in accordance with rulings made from time to time by the insurance rating bureaus. These rulings are made to meet with conditions found in building and may be affected by the design or construction of the building. Under this heading come communicating openings from one part of the building to another, or from the garage building to another building adjoining it. Also the items of tenants, faults of management, exposure to other structures, locations in certain districts and special departments such as painting and varnishing, paint and varnish storage, upholstering, etc., come under this heading. When bearing these and similar items in mind the architect can design and construct the building in such a way as to facilitate the use of the building and so as to eliminate as many faults of management as possible. Under faults of management come care of ashes, furnaces, greasy or oily clothing, waste or rags, rubbish and sweepings, packing materials, boilers, et cetera, Some other items are conditions of gas brackets, stoves, hot plates, and tubing; conditions of chimneys, smoke stacks, "No Smoking" signs, steam pipes, stoves, stove pipes, and the locations of open flame and heating apparatus and utensils.

On account of the danger of fire from the explosion of gasoline vapors which are heavier than air it is desirable to have boilers and furnaces cut off from the garage section of the building. Preferably they should be above the basement, and not in the basement, when they are not so cut off. In the former case there would be a charge of fifteen cents per hundred dollars added to the base rate, whereas in the latter case the added charge would be twenty-five cents. If the heating is done by stoves the extra charge would be ten cents. For open fire heat the extra charge would also be ten cents or more. Open fires for forges would come under the same heading.

The inside finish of the garage section of a building also affects the insurance rates. We often see metal ceilings and walls in frame and non fire-proof buildings but in general they are not recognized as in the event of fire they would shrivel and not be fire retardant. In masonry building, non-fire proof, if the walls and ceilings are plastered on wood lath there would be an extra charge of five cents for each but this extra charge would not be incurred in a frame building. Where the finish on the walls or ceilings of a non-fireproof masonry building is of wood, cloth, or of a paper product, an extra charge of ten cents per hundred dollars is made for each. In a frame building only one half this charge is made for such finishes. Very often special consideration will be given for stud partitions filled with gypsum blocks, metal lathed, and plastered on both sides with gypsum plaster applied in three coats. Such partitions are claimed to resist a hot fire for hours.

Another source of fire is the garage repair pit. Oil and gasoline are apt to flow into a pit unnoticed and oil soaked rags and waste are apt to fall into it and remain there unnoticed until spontaneous combustion takes place. For pits with wood sides and wood floors a charge of twenty-five cents is added to the base rate. If the wood floors are omitted and there are dirt floors instead, the extra charge is only fifteen cents. The extra charge for concrete, stone, and brick pits is still less. Such pits if not provided with a drain are charged for at ten cents above the base rate. If they are provided with a drain the added charge is only five cents.

When a commercial garage is used by only one concern rather than by several, there is no divided responsibility and more attention is paid to the proper maintenance of the building. Therefore when a garage is used exclusively for the automobiles of one concern a reduction of twenty-five per cent is generally made. It has been found that the more floors containing automobiles the greater is the fire hazard so that if vehicles are kept above or below the grade level, an extra charge is made for each one thousand square feet of accommodation on each such floor. This extra charge is five cents per hundred dollars.

But the type of work that is to be done in the building also affects the insurance rates. The larger the amount of the work, the larger the fire risk. While the architect cannot control this factor, it is interesting to know how the insurance authorities are apt to deal with it. For the construction work on automobiles there is usually an extra charge of twenty-five cents, and for repair work, an extra charge of five cents is usually made for each hand instead of one. For the use of power machinery there is an extra charge of five cents and for the use of the oxygen process for cleaning engine cylinders there is an extra charge varying from twenty-five cents to fifty cents. For the use of a gasoline spray for cleaning automobiles, the most dangerous work performed, the extra charge is one dollar.

Charges also vary in accordance with the amount of fire protection available. Often fire pails and fire extinguishers are found defective, in which case an added charge of ten cents is made. Often apparatus is installed even though it does not meet with the requirements of the Board of Fire Underwriters and, of course, such apparatus is not recognized and the rates are established as if the apparatus were not installed at all. A deduction of five cents is made from the base rate if the building is adequately supplied with approved stand pipes and fire hose.

A further reduction of three cents per hundred is made if an improved auxiliary fire alarm is installed. When there are three public fire hydrants located within two two hundred feet of the building a deduction of three cents per hundred is made. If there are only two public fire hydrants located within two hundred feet of the building and a standard private outside hose supply is provided together with approved fire drills at sufficient intervals, five cents may be deducted from the base rate. This is, of course, when the insurance is figured on the protected basis as previously mentioned. When the insurance is reckoned on the unprotected basis a deduction of ten cents per hundred will be deducted if there is an abundant supply of water with ample pressure and several hydrants are placed within two hundred feet of the building. In this case, however, the employees must have fire drills at frequent intervals under proper supervision. Standard hose equipment must be included under these conditions. Sometimes private hydrants are connected with public water supply and are recognized as proper equipment and as being entitled to more economical classification than the standard basic rate. Under certain conditions additional deductions may be made if approved equipment is installed.

(*To Be Continued*)

PUBLICATIONS OF INTEREST TO THE SPECIFICATION WRITER.

Any publication mentioned under this heading will be sent free, unless otherwise noted, upon rqeuest, to readers of PENCIL POINTS *by the firm issuing the publication. When writing for any of these items please mention* PENCIL POINTS.

Specimens of Bronze Work.—Brochure showing bronze name plates, tablets for business buildings, memorials, etc. and a selection of architectural bronze features suitable for banks and many other types of modern building. 32 pp. 7½ x 9½. Chicago Architectural Bronze Co., 4740 No. Clark St., Chicago, Ill.

O-B Valves.— Illustrated handbook showing complete line of valves including packless radiator valves and other types useful in modern buildings. Drawings and complete specification data. 108 pp. 6 x 9. Handsome binding. Ohio Brass Co., Mansfield, Ohio.

Ash Hoists.— Book No. 5073 illustrating and describing complete line of ash handling equipment. Sectional drawings and complete data. 32 pp. 6 x 9. Herbert Morris, Inc., Buffalo, N. Y.

Waterproofing.—Loose-leaf portfolio. Standard filing size. Contains complete data on waterproofing compounds. Specifications. A. C. Horn Co., Horn Bldg., Long Island City, N. Y.

Theatre Seating.—Illustrated catalog and handbook covering subject of seating for the modern theatre and auditorium. Profusely illustrated. 8½ x 11. 64 pp. American Seating Co., 14 E. Jackson Blvd., Chicago, Ill.

Published by the same firm. School Furniture. Uniform with the above. Covering especially all types of seating suitable for school use. 48 pp. 8½ x 11.

Stairs for Better Built Homes.—Attractive illustrated booklet covering subject of stairs and stairways in the modern residence. Curtis Companies Service Bureau, Clinton, Iowa.

Rodd Floors of California Redwood Blocks.—Booklet illustrated in color covering subject of block flooring for all conditions requiring great durability. Specifications for mills, department stores, hospitals, hotels, etc. The Rodd Co., Century Bldg., Pittsburgh, Pa.

Clark Jewel Gas Stoves.—Catalog No. 119 covers full line of cooking equipment with oven heat regulators and other modern attachments. Suitable for residences, hotels, club houses, etc. 70 pp. 5 x 9. George M. Clark & Company, 179 No. Michigan Ave., Chicago, Ill.

Solid Metal Double Hung Window.—Bulletin A-1. Detail sheet showing construction with specifications. Standard filing size. S. H. Pomeroy Co., Inc., 282 E. 134th St., New York.

Curtis Lighting.—Loose-leaf booklet with color plates. Detail plate forms and much other useful information on the subject of modern illumination. Standard filing size. Curtis Lighting, Inc., 1119 W. Jackson Blvd., Chicago, Ill.

Business Floors.—Booklet with color plates covering subject of modern flooring for all types of business buildings including offices, banks, hotels, stores, restaurants, theatres, libraries, churches, schools, club rooms, hospitals, etc. Armstrong Cork Co., Lancaster, Pa.

The Milcor Manual.—Data Book No. 20. Covers materials and methods of fireproof construction. Many drawings. Typical details applicable to a wide variety of buildings. 64 pp. 8½ x 11. Milwaukee Corrugating Co., Milwaukee, Wis.

Published by the same firm. Metallic Construction for the Modern Home. Booklet showing application of Milcor products to the modern residence. Color plates and much useful data. 20 pp. 8½ x 11.

Through the Ages.—Monthly illustrated magazine dealing with marble for both exterior and interior use. The June issue has an interesting article on Gothic Architecture in Belgium and Holland with illustrations in sepia. 70 pp. 8½ x 11. National Association of Marble Dealers, 242 Rockefeller Bldg., Cleveland, Ohio.

"Ebco" Ventilated Toilet Fixtures.—Bulletin "I" covers subject of modern plumbing specialties for schools, public institutions and factories. Roughing-in drawings and much useful data. 32 pp. 8½ x 11. D. A. Ebinger Sanitary Mfg. Co., Columbus, Ohio.

Watson Electric Elevators.—Portfolio of blue prints showing ten working drawings of typical elevator and dumbwaiter installations, suitable for application in many types of buildings. Watson Elevator Co., Inc., 407 West 36th Street, New York.

Fenestra Casements.—Booklet announcing new Fenestra line. Detail drawings, interiors, drawings covering screening and shading, etc. 20 pp. 8½ x 11. Detroit Steel Products Co., Detroit, Mich.

Present Day Schools.—Illustrated brochure covering the application of terra cotta to modern school buildings. 32 pp. 8½ x 11. National Terra Cotta Society, 19 West 44th St., New York City.

Better Banks.—Illustrated brochure treating of modern bank buildings, large and small. 32 pp. 8½ x 11. National Terra Cotta Society, 19 West 44th St., New York City.

Dangler Gas Ranges.—Catalog No. 205. Showing full line of equipment suitable for all types of buildings and uses. 50 pp. 7 x 10. Dangler Stove Co., Cleveland, Ohio.

Color in Architecture.—Brochure illustrated in color and with numerous engravings in sepia, on the basic principles of the application of color in available mediums. 8½ x 11. 38 pp. National Terra Cotta Society, 19 West 44th St., New York City.

Arktite Circuit-Breaking Plugs and Receptacles.—Bulletin No. 2055 covers this new line of electrical appliances suitable for many uses. Standard filing size. Crouse-Hinds Company, Syracuse, N. Y.

The Ventadoor.—Booklet showing line of ventilators for doors, transoms, etc. Specifications. Van Zile Ventilating Corpn., 280 Madison Ave., New York.

Onliwon Paper Towels.—Sample packet with descriptive matter covering wall cabinets for use in public buildings, offices, etc. A. P. W. Paper Co., Albany, N. Y.

Atlantic Terra Cotta.—Monthly magazine. Volume V11, Number 1 deals with subject of flashings. Specifications for sheet copper work, construction drawings, flashing details. A useful addition to the library of every architect, specification writer and draftsman. Atlantic Terra Cotta Co., 350 Madison Ave., New York.

"White" Efficiency Homes.—A. I. A. classification 35-N-9. Attractive brochure illustrated with twenty original residence designs with elevations and floor plans of each. Description of "White" Space-saving Devices. 32 pp. 8½ x 11. The "White" Door Bed Co., 130 No. Wells St., Chicago, Ill.

E S Bulletin.—The issue for June contains an interesting article on the arrangement of dumbwaiters for different conditions and much useful data. Standard filing size. Elevator Supplies Co., 1515 Willow Ave., Hoboken, N. J.

Evernu Hard Rubber Seats.—Catalog A. Complete information for the specification writer. Sectional drawings, methods of application, etc. Standard filing size. Never Split Seat Co., Evansville, Ind.

Furniture for the Drafting Room.—Catalog F-24.—New catalog showing up-to-date line of drafting room furniture and equipment. Useful wherever drafting is done. 40 pp. 6 x 9. C. F. Pease Co., 874 North Franklin St., Chicago, Ill.

Fighting Rust With Sublimed Blue Lead.—Treatise on the subject fully illustrated showing modern methods of fighting corrosion of materials of construction. Cloth bound. 80 pp. 6 x 9. Eagle-Picher Lead Co., 208 So. La Salle St., Chicago, Ill.

Suggestions for Architects and Their Clients.—Number Four. Booklet with four pages of color plates showing the highest class of bathroom equipment for the luxurious modern residence. Standard filing size. Crane Company, 836 So. Michigan Ave., Chicago, Ill.

Published by the same firm. A complete Service for Engineers and Their Clients. Number one. Folder with color plates outlining scope of this service which will also interest many members of the architectural profession.

Duraflex Flooring.—Booklet describing this flooring, its uses, specifications, methods of application, detail drawings, etc. Standard filing size. The Duraflex Company, Baltimore, Md.

Ruud Water Heaters.—Loose-leaf specification portfolio giving complete information on the subject. Large layout sheets, complete instructions for installing, sections, details, specifications, etc. 8½ x 11. Ruud Mfg. Co., Pittsburgh, Pa.

Ruud Delineator.—A great convenience in the drafting room in securing proper perspective immediately. Ruud Mfg. Co., Pittsburgh, Pa.

Alpha Aids.—No. 38. This issue contains an interesting article on Rural Sanitation with drawings and other data. Also an article on Cement Driveways and a New England Cottage with elevation, plans and sections. Alpha Portland Cement Co., Easton, Pa.

"Sterling" Engineers Wye Level A. B.—18—Folder describing this equipment. Also transits convertible levels, etc. Warren-Knight Co., 136 N. 12th St., Philadelphia, Pa.

The "Richmond" Manual.—Handbook covering heating specialties. Data on chimneys, vacuum cleaners, and many other accessories. Convenient pocket size. 204 pp. Richmond Radiator Company, 1480 Broadway, New York.

How to use Valspar on Furniture.—Useful booklet with directions and specifications. Valentine & Co., 456 4th Ave., New York.

Published by the same firm. How to Use Valspar on Interior or Exterior Work and How to Use Valspar on Floors.

Elastica Specifications.—Specification covering exterior wall coating on old or new work. Standard filing size. American Materials Co., 101 Park Ave., New York.

Craftex.—Folder illustrated with color plates showing methods of applying this modern material on interior wall surfaces. Textures and colors illustrated and described. Specifications. Standard filing size. The Craftex Co., 101 Park Ave., New York.

Non-Cracking Terrazzo Flooring.—Data sheet showing improved method of laying floors of this type introducing new factor in floor design. Diagrams and full information. 8½ x 11. L. Del Turco & Bros., Harrison, N. J.

The Cutler Mail Chute.—Illustrated booklet describing this type of equipment for mailing letters from the upper stories of buildings. 12 pp. 7 x 10. The Cutler Mail Chute Co., Rochester, N. Y.

(*Continued on Page* 84)

Built-Up Roofing for Modern School Buildings.—A. I. A. standard classification 12B14. Booklet covering subject illustrated by 50 examples of modern school structures of various types and sizes. Specifications and other useful data. 36 pp. 8 x 11. Philip Carey Co., Lockland, Cincinnati, Ohio.

Published by the same firm. Specifications for Built-up Roofing. Eight specifications covering different problems with detail drawings covering flashings, etc. 24 pp. 8x11. Pipe and Boiler Coverings. Catalog No. 1362, showing application of asbestos and magnesia products for insulating purposes. Specifications, much technical data, diagrams and tables. 70 pp. 6 x 9.

Anti-Slip Treads.—Bulletins describing Carborundum, Bronzalum and Feralun treads. Text on stair and side walk hazards. American Abrasive Metals Co., 50 Church St., New York City.

Specifications and Working Details.—Covers stucco, stucco base, plaster base and insulating base. Instructions for mixing and applying, details, drawings and specifications. 8 full page plates. 20 pp. 8 x 11. The Bishopric Mfg. Co., 110 Este Ave., Cincinnati, Ohio.

Win-Dor Casement Window Operators.—Catalog No. 9 describing modern casement hardware, sectional drawings and standard half size details. 14 pp. 8½ x 11. The Casement Hardware Co., 235 Pelouze Bldg., Chicago, Ill.

Celotex Specifications.—Loose-leaf folder with large sample of material. Complete specifications for all uses, details of construction covering exterior finishing for frame buildings, sheathing for brick veneer buildings, roof insulation and a variety of other uses. 8½ x 11. The Celotex Co., 645 No. Michigan Ave., Chicago, Ill.

The Donley Book of Fireplaces.—Illustrated brochure showing drawings and photographs of many attractive fireplaces. Large sheet showing drawings of construction. 16 pp. 9 x 12. The Donley Brothers Co., 13933 Miles Ave., Cleveland, Ohio.

Store Front Construction.—Full size details showing Kawneer construction. 16 x 20. Kawneer Mfg. Co., Niles, Mich.

Craftsmanship in Wrought Iron.—Handsomely illustrated brochure with full page plate in sepia showing examples of wrought iron craftsmanship. 24 pp. 8 x 11. Ferro Studio, Inc., 228 East 150th St., New York City.

Theatrical Lighting Equipment and Effects.—Catalog and handbook covering line of specialties, technical data on the subject, tables and specification data. 76 pp. 6 x 9. Display Stage Lighting Co., Inc., 344 West 44th St., New York City.

Andersen Window Frames.—Illustrated booklet with drawings covering design and construction of window frames. 24 pp. 8 x 11. Andersen Lumber Co., Bayport, Minn.

Doors for the Home and for the Public Library.—Two special bulletins covering modern metal equipment for these two classes of buildings. Entrances, elevator enclosures, stairs, halls and fire exits, corridor and communicating doors and doors for special uses are considered. Specifications and diagrams showing construction and suggestions for ordering. 8½ x 11. 16 pp. Dahlstrom Metallic Door Co., Jamestown, N. Y.

Brass Pipe for Water Service.—Bulletin B-1 monograph on the subject, typical layouts and valuable engineering data for architects, engineers and contractors. 8½ x 11. 32 pp. The American Brass Co., Waterbury, Conn.

Kohler Specifications.—Loose-leaf book containing illustrations of the Kohler line of plumbing fixtures with specifications therefor. 8½ x 11. Kohler Company, Kohler, Wis.

Published by the same firm "Enameled Plumbing Ware," booklet describing processes of manufacturing and illustrating correctly equipped bathrooms and kitchens and many special ties. 48 pp. 5½ x 8.

Gold-Seal Treadlite Tile.—Handsome brochure in color on the subject of modern floor treatment. Many designs suitable for a large variety of uses. Suggestions for every type of building. Specifications. 40 pp. 8½ x 11. Bonded Floors Co., 1421 Chestnut St. Philadelphia, Pa. Published by the same firm. Hospital Floors, a booklet dealing with this important subject. Illustrated in color. Distinctive Floors.—Folder illustrated in color with twelve plates showing different patterns of Gold-Seal Rubber Tile. Standard Specifications for Installing Battleship Linoleum over Concrete. A. I. A. File 28 covers standard practice for this material.

Frink Lighting Service for Hospitals.—Catalog covering special lighting equipment required for this type of building. 12 pp. 8½ x 11. I. P. Frink, 24th St. & 10th Ave., New York City.

Published by the same firm "Lighting Service for Stores," 24 pp., and "Picture Lighting," 24 pp.

Solid Steel Reversible Windows.—Illustrated Booklet No. 1-24 covering equipment for office buildings, schools, hospitals and other structures. Sectional drawings and details. 20 pp. 9 x 12. Crittall Casement Window Co., Detroit, Mich.

Published by the same firm "Crittall Casements," catalog No. 22, profusely illustrated with exterior views, sections, details, etc. Includes standard and special hardware. 76 pp. 9 x 12.

Your Home Screened the Higgin Way.—Attractive illustrated booklet on subject of screening and weather-strips. 14 pp. Color plates. 8½ x 11. Higgin Mfg. Co., Newport, Ky.

Limestone Homes.—Portfolio of a series of designs prepared by a leading firm of architects. 12 rendered perspectives, floor plans and complete information. 8½ x 11. Indiana Limestone Quarrymen's Association, Box 784, Bedford, Indiana.

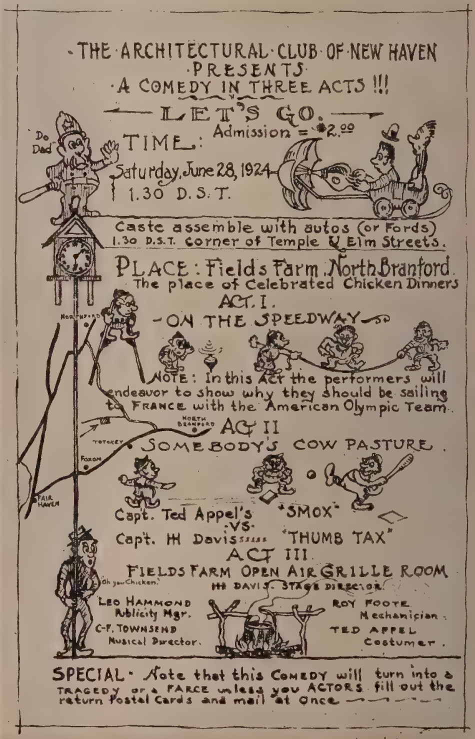
Temperature Regulation.—Technical bulletin on subject of temperature regulation under all conditions. Complete technical data, charts, etc. 16 pp. 8½ x 11. The Fulton Co., Knoxville, Tenn.

Published by the same firm "Sylphon Specialties," series of loose leaf bulletins giving accurate engineering data on heating specialties, temperature and pressure controlling instruments, valves, etc. Should be in the files of every specification writer, architect and draftsman.

China Bathroom Accessories.—Catalog F. Illustrates and describes complete Fairfacts line including medicine cabinets, and price lists. 16 pp. 3½ x 9. The Fairfacts Co., Inc., 234 W. 14th St., N. Y. C.

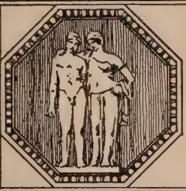
Published by the same firm, "The Perfect Bathroom," describing most modern conveniences and necessities. Uniform in style and size with above.

Olde Stonesfield Roofs.—Brochure with color plates illustrating artistic roofs and walks. Eighteen subjects. 5½ x 6½. The John D. Emack Co., 112 South 16th St. Philadelphia, Pa.



·THE·ARCHITECTURAL·CLUB·OF·NEW HAVEN
·PRESENTS·
·A COMEDY IN THREE ACTS !!!
—LET'S GO.—
Admission = $2.00
TIME:
Saturday, June 28, 1924
1.30 D.S.T.
Caste assemble with autos (or Fords)
1.30 D.S.T. Corner of Temple & Elm Streets.
PLACE: Fields Farm. North Branford.
The place of Celebrated Chicken Dinners
ACT. I.
-ON THE SPEEDWAY-
NOTE: In this Act the performers will endeavor to show why they should be sailing to France with the American Olympic Team.
ACT II
SOMEBODY'S COW PASTURE.
Capt. Ted Appel's "SMOX"
·VS·
Capt. H H Davisssss "THUMB TAX"
ACT III.
FIELDS FARM OPEN AIR GRILLE ROOM
H H DAVIS. STAGE DIRECTOR.
LEO HAMMOND
Publicity Mgr.
C-F. TOWNSEND
Musical Director.
ROY FOOTE
Mechanician.
TED APPEL
Costumer.
SPECIAL· Note that this COMEDY will turn into a TRAGEDY or a FARCE unless you ACTORS fill out the return Postal Cards and mail at Once

Announcement of the Outing of the Architectural Club of New Haven, Conn.



PENCIL POINTS

VOLUME V SEPTEMBER 1924 NUMBER 9

WHY NOT?

NOW that summer is over and everyone will soon be back on the job, why not plan to get as much good as possible out of club activities during the coming months? If there is an architectural club in your city or town, why not put your best effort back of it in your spare time, whether you are an architect or a draftsman? If there is no local club, why not organize one?

The value of the architectural club to all men engaged in architectural work has been recognized by PENCIL POINTS right along and we are stronger for the club idea now than ever before. If you have read the brief biographies we have published of young men who have distinguished themselves by winning scholarships, by making sketches of special interest, etc., you must have been impressed by the part some architectural club has played in the development of almost every one of these men. This feature alone justifies all the effort necessary to form and maintain architectural clubs. In addition, there is the benefit to the great body of architectural men who take part in the club activities in one way or another. Probably the men who benefit as much as anyone are the men who give their time to the conduct of the club work or co-operate in the carrying out of the program.

The greatest benefit unquestionably is the sense of unity of purpose between draftsman and archiarchitect that grows in a well-conducted architectural club.

The architect who has little time, under the pressure of his practice, to pass on to the men in his drafting room the results of his study and experience, finds an opportunity to reach a much larger circle in addressing an architectural club.

The more advanced men in the architectural offices find in the club a means of passing along to the younger and less experienced men the results of their experience, and they find a field for the exercise of whatever talent for organization and executive ability they may possess.

To the young man the architectural club is a godsend. In it he finds the men who open up new vistas in the vast realm of architecture which he has only just begun to explore. In the club he finds the congenial companionship of men of his own age and circumstances who have the same interests. In the club he finds, very often, a well conducted atelier in which he can follow the program of the Beaux-Arts Institute of Design under the guidance of an able Patron.

For all, for *ancien* and *nouveau,* for architect and draftsman, the social events of the club are enlivening and enjoyable and they have a very practical value that is apparent when we recall the old saying that "All work and no play, makes Jack a dull boy."

Now it is not difficult to organize an architectural club almost anywhere, for the size and type of the club will correspond to the size, needs and possibilities of its locality. A mere handful of men interested in sketching, drawing from life, listening to talks on architecture, doing the design problems, or coming together to chat and play games, if they are engaged in architectural work may truly be regarded as an architectural club. The elaborate program, the fine club house may come later; they are not indispensable.

We believe that it is essential for the best results that a number of the most able architects in the city or town be interested in the work of the club. The help such men can give is invaluable. One is needed as patron of the atelier, and it is well for a club to have an atelier unless there are enough other ateliers in the town.

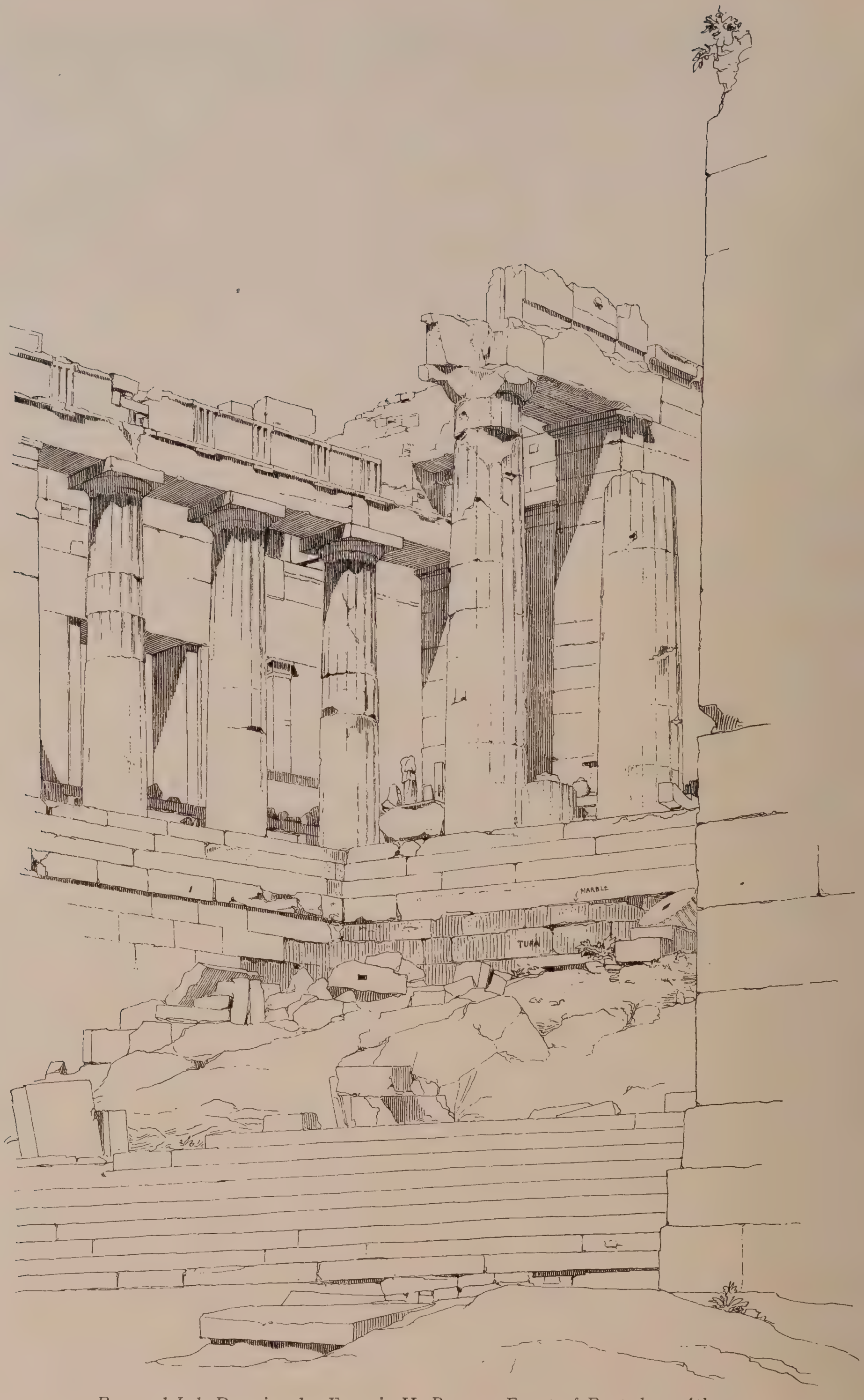
Several able men are needed to give talks in the course of the season's program. Men of business experience and stability can steer the club's craft through difficulties and, all in all, the architects who take an interest in the club are a most important factor.

The backbone of the club of course must be its general membership, made up of men of various degrees of attainment all bound together by their common interest in architecture.

In the next issue we are going to print contributions from as many clubs as possible in all parts of the country, telling about their organizations and their activities. We want to put into the October issue a fund of interesting, helpful matter from clubs everywhere.

We want every club represented by a letter—let's make this a regular get-together of architectural clubs.

Now, if there is no club in your locality, why not organize one, however small. Read the letters from clubs that will be printed in the October issue of PENCIL POINTS. There you will learn how some of the big clubs were founded, and how they grew. you will learn what the clubs, big and little, are doing and planning. Then make a start, talk to a few of the other men and get a club going.

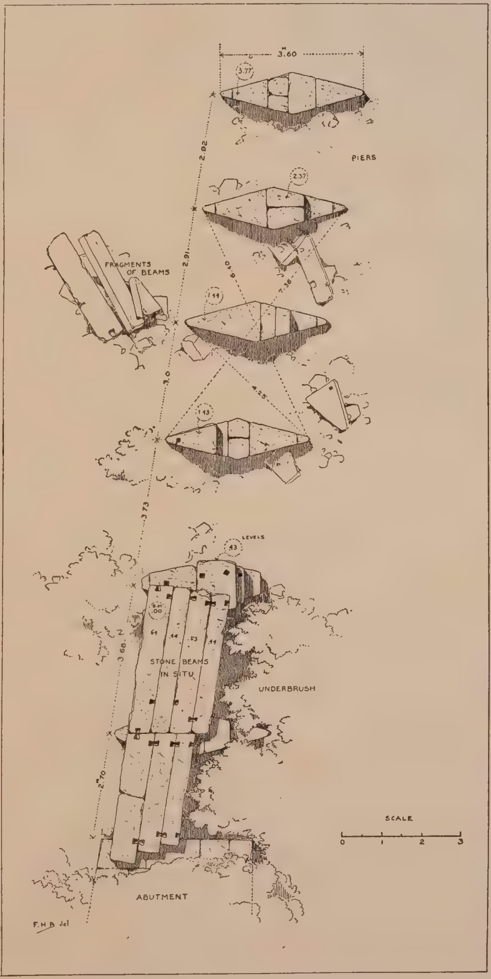


Pen-and-Ink Drawing by Francis H. Bacon. Front of Propylæa, Athens.

MASTER DRAFTSMEN, V

FRANCIS H. BACON

FRANCIS H. BACON left the Massachusetts Institute of Technology in 1876 after finishing the Special Course in Architecture under Professor Wm. R. Ware. The following spring he went to New York to get a job as draftsman and first located in the office of Carl Pfeiffer "at nothing a week." Through a friend he got a chance to work evenings for McKim, Mead and Bigelow—which must have been an encouraging change from working upon Mr. Pfeiffer's drawings, the latter being usually, as I remember, reproductions of a German version of the Romanesque style. Mr. McKim would take the young fellows who worked in his office out to supper, tell them stories of Paris, and its students and, having aroused the imaginations of the younger men, they would return to the office and "work like beavers!" Stanford White was then head man for H. H. Richardson with an office at the other end of the corridor in the building at 57 Broadway. Mr. Bacon tells of White coming "rushing down the corridor to our end to see what we were doing, offering whirlwind criticisms, etc." Mr. Bigelow had just returned from Europe with some charming sketches made on metallic paper which were a great source of inspiration to young Francis Bacon. He afterwards used the idea and passed it on to others. (His younger brother, Henry Bacon, used the same kind of paper in making his sketches while abroad as Rotch Scholar, and Albert Kahn told me many years ago, of having met Henry Bacon in Europe and received that idea from him, while Mr. Kahn was making his memorable sketches, which he made while Traveling Scholar for *The American Architect*. It requires a sure touch to make sketches on metallic paper as no erasures can be made.



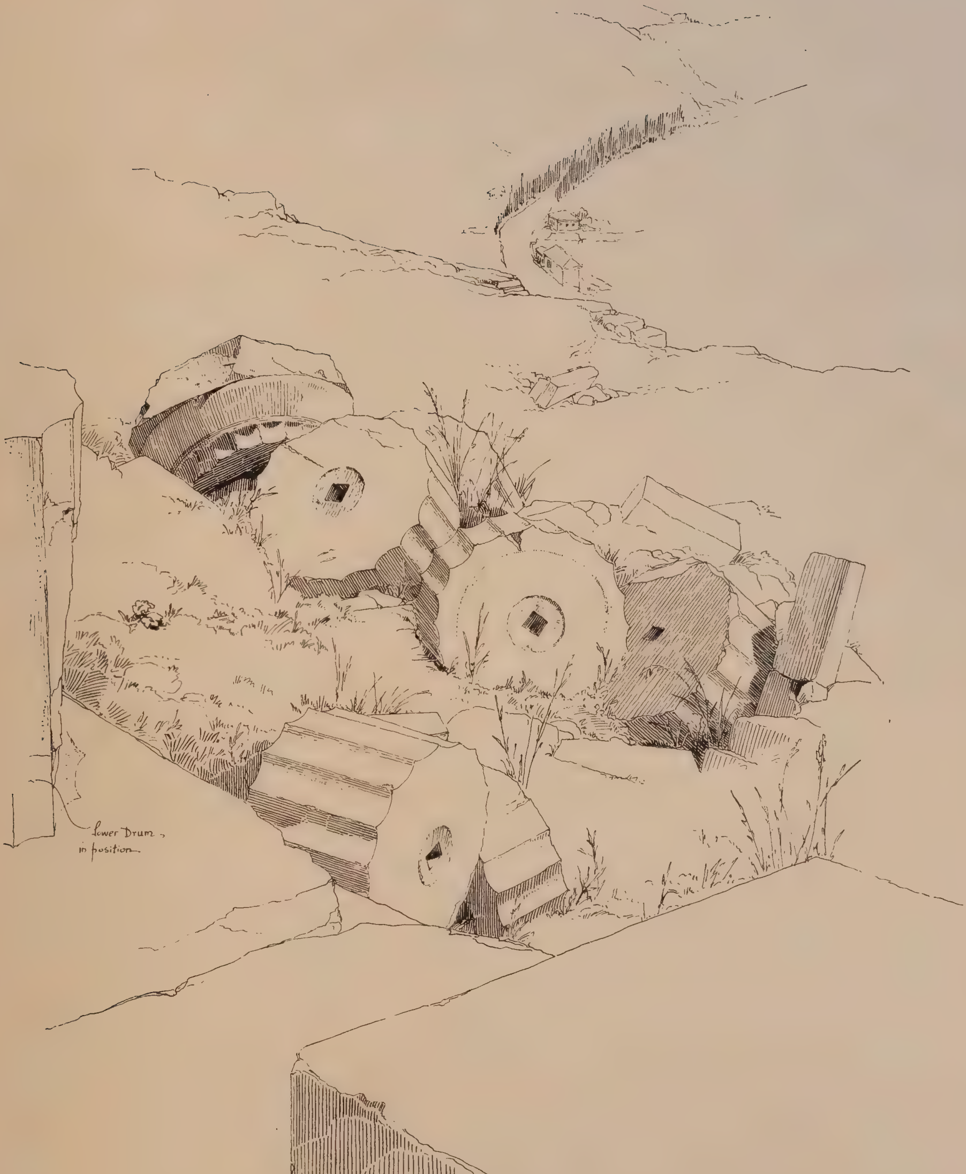
The Greek Bridge at Assos, Detail of Piers and South Abutment—Drawing by Francis H. Bacon. From "Investigations at Assos."

Mr. Bacon managed to let Mr. Mead know that he was after a better job than that which he had with Pfeiffer and through Mr. Mead's influence he obtained a position at Albany with Prentice Treadwell, as head draftsman, where he remained until the summer of 1878.

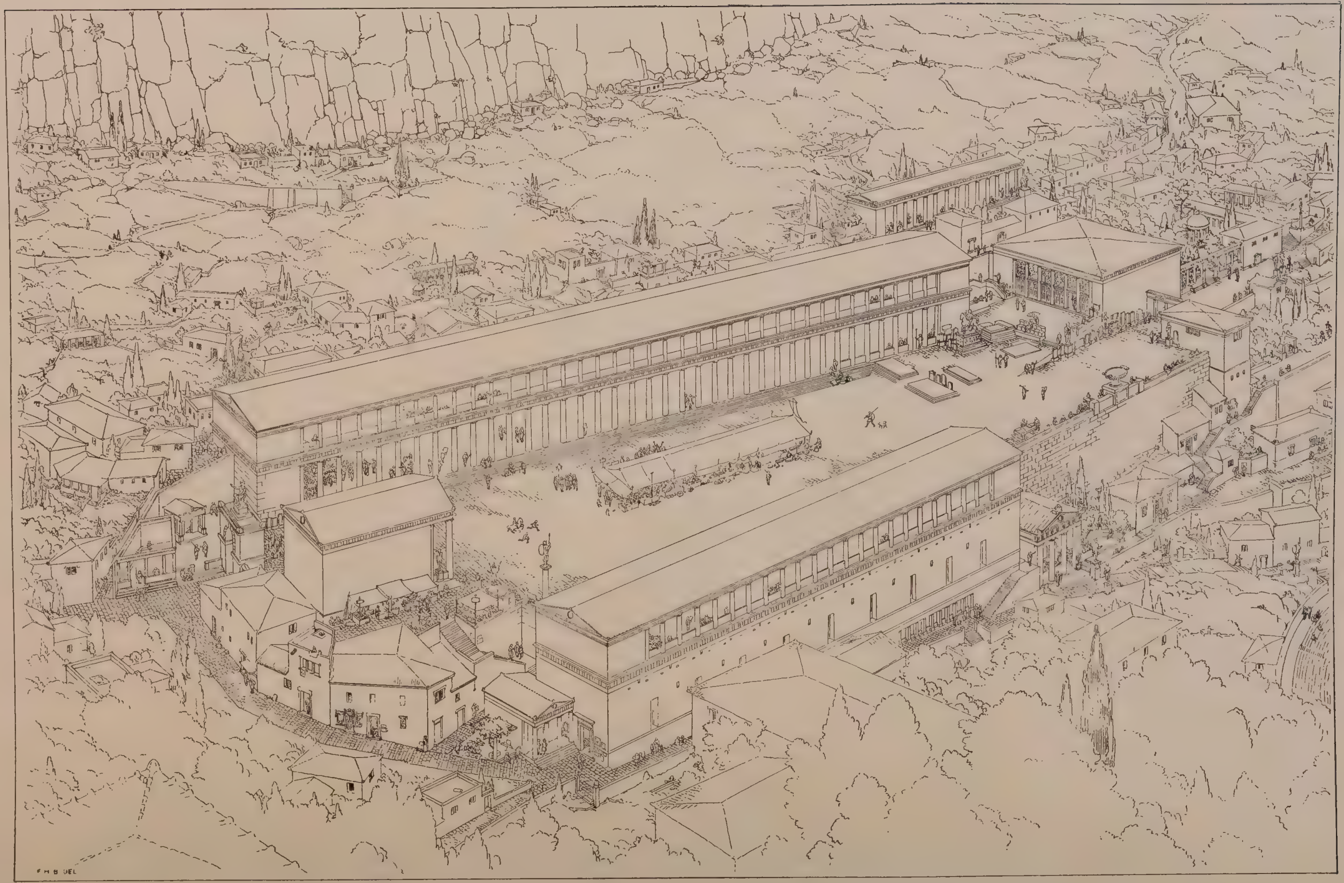
That was an eventful year. Bacon and his friend, J. T. Clarke, each of whom had reached the ripe old age of twenty-two, sailed for England on the way to Turkey and Greece. Clarke was to write a history of Doric Architecture and Bacon was to make sketches of all the temples and sites. They had each saved up about five hundred dollars, and the Boston Society of Architects added a small subscription. On the way over they figured up the expense of all they wanted to do and found they did not have money enough to carry out their plans in the ordinary way; so they decided to buy a boat in England that they could live on, sail her across the channel, up the Rhine and down the Danube to the Black Sea, through to Constantinople and the Hellespont to the Aegean Sea, cruising through the Greek Islands and visiting the ancient Greek sites. All of which plan they executed and which Mr. Bacon recorded in "The Log of the Dorian,"—parts of which were published in the *Architectural Review*, 1912.

Among the sites visited was that of Assos in the Southern Troad opposite Mitylene, where there were the remains of a large Greek city and of a very early Doric temple. Mr. Clarke wrote an important report of this temple to Professor

Pen-and-Ink Drawing by Francis H. Bacon. The Acropolis, Athens, Seen from the Temple of Jupiter Olympus. (*August* 27, 1879.)



Pen-and-Ink Drawing by Francis H. Bacon. South Side of Parthenon, Athens.
(Column overthrown by explosion.)



Drawing by Francis H. Bacon. The Agora at Assos, Restored. From "Investigations at Assos."

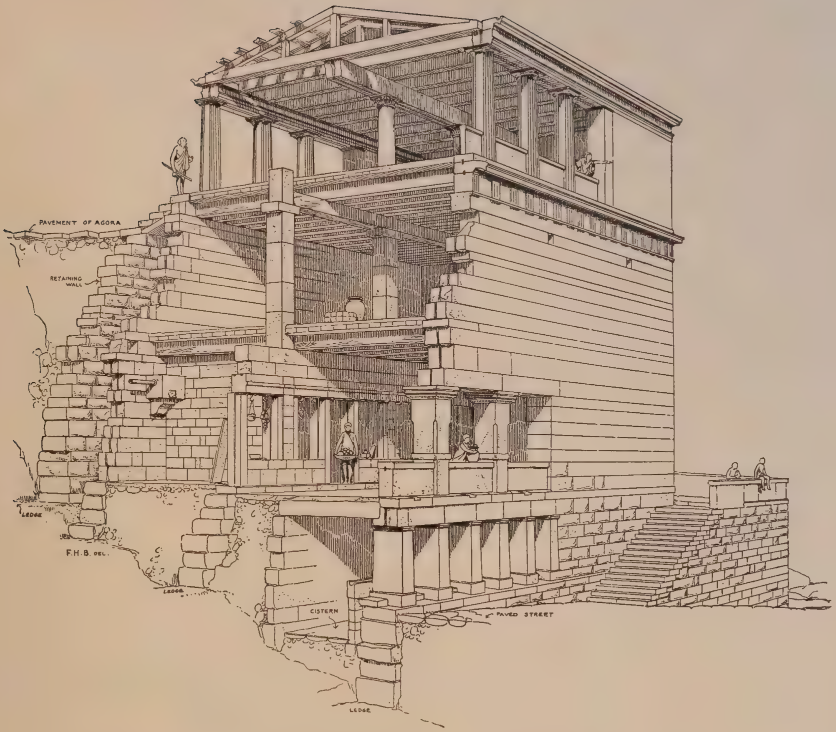
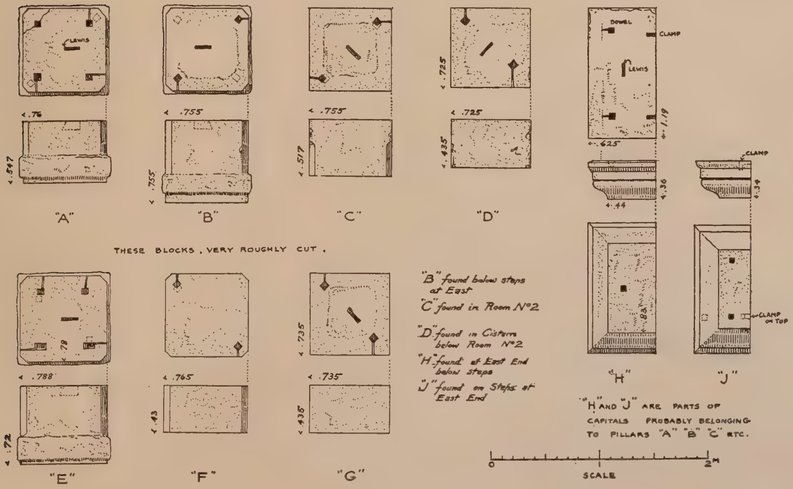


FIG. 1 PERSPECTIVE SHOWING CONSTRUCTION—ALTERNATIVE SCHEME OF RESTORATION


LEWIS
.76
.547
"A"
.755
.755
"B"
.755
.517
"C"
.725
.725
.435
"D"
DOWEL
CLAMP
LEWIS
1.19
.625
.36
.44
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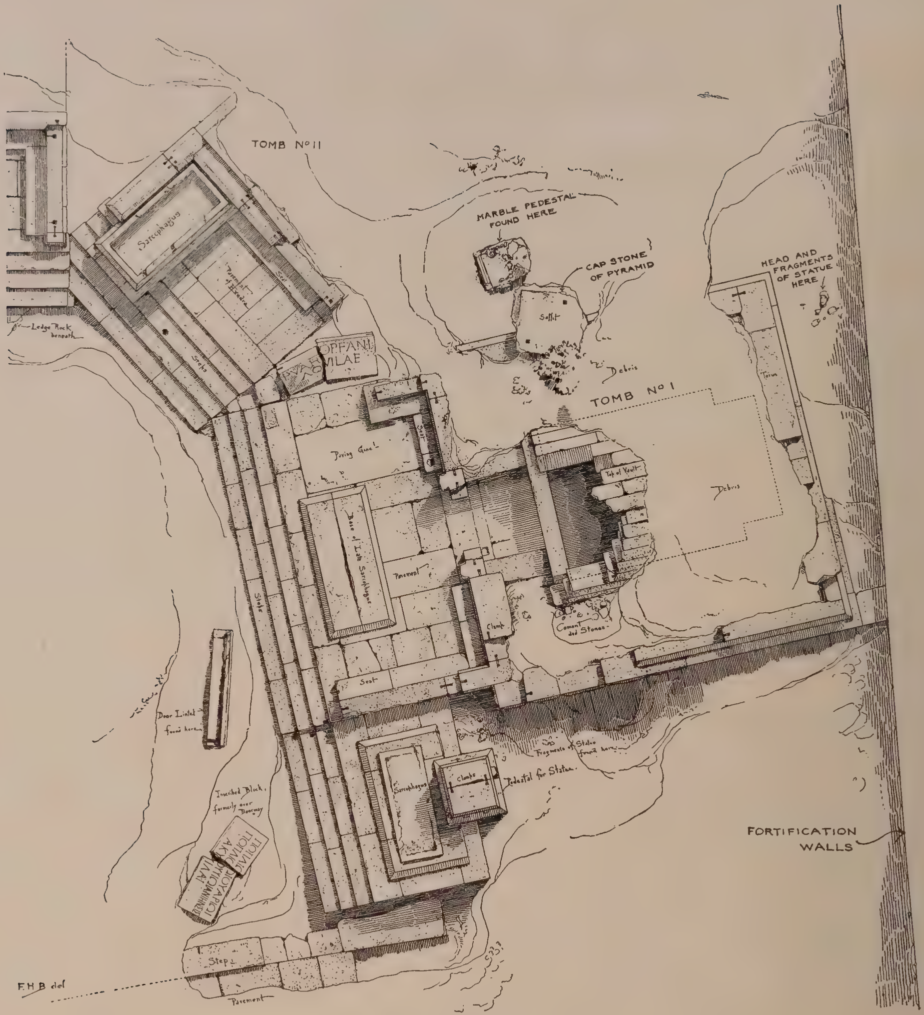
.34
THESE BLOCKS, VERY ROUGHLY CUT,
.78
.788
.72
"E"
.765
.43
"F"
.735
.735
.435
"G"
"B" found below steps at East
"C" found in Room No2
"D" found in Cistern below Room No2
"H" found at East End below steps
"J" found on Steps at East End
.83
"H"
CLAMP ON TOP
"J"
"H" AND "J" ARE PARTS OF CAPITALS PROBABLY BELONGING TO PILLARS "A" "B" "C" ETC.
0
1
2M
SCALE

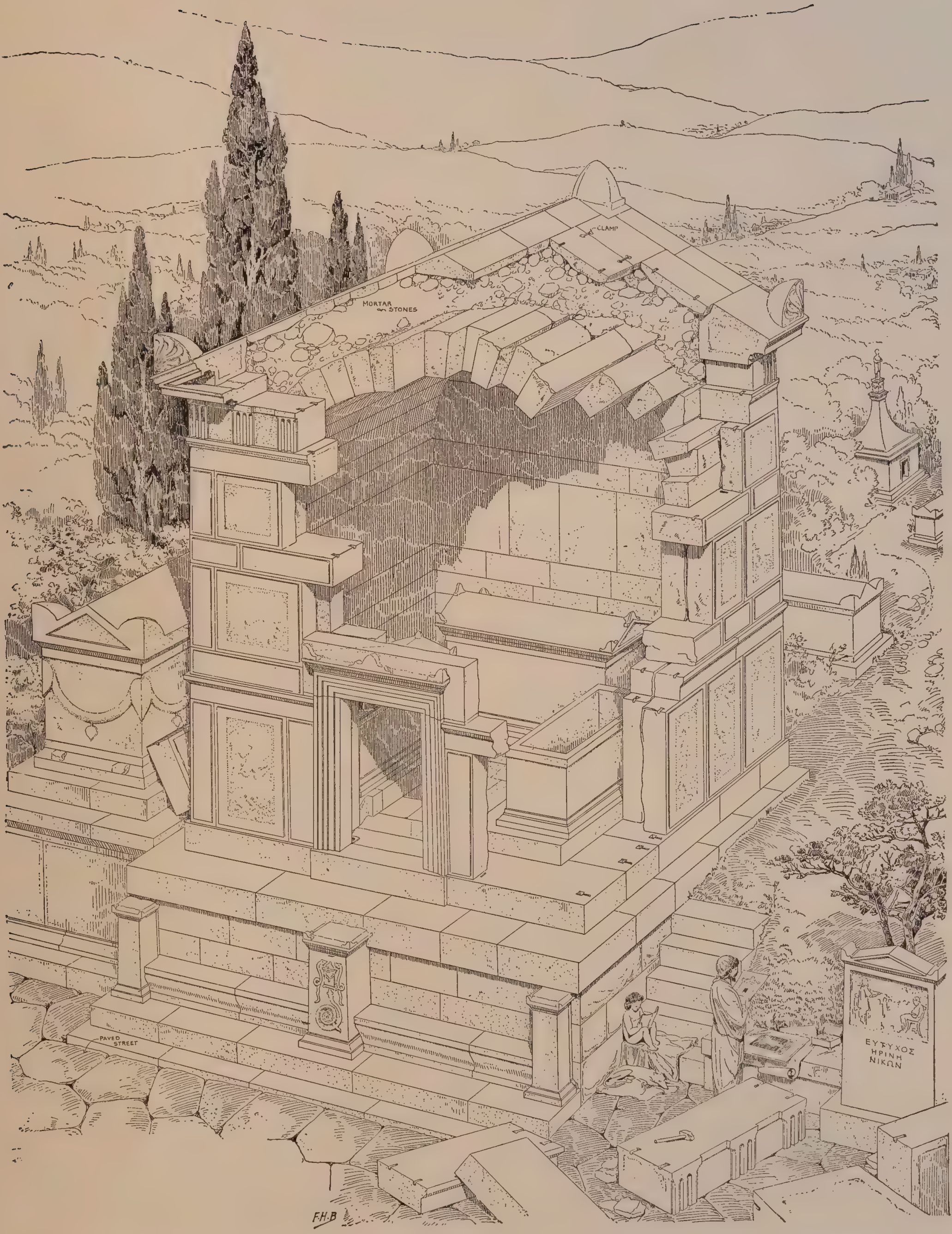
FIG. 2 EXISTING FRAGMENTS

Drawing by Francis H. Bacon. Bazaar at Assos. From "Investigations at Assos."

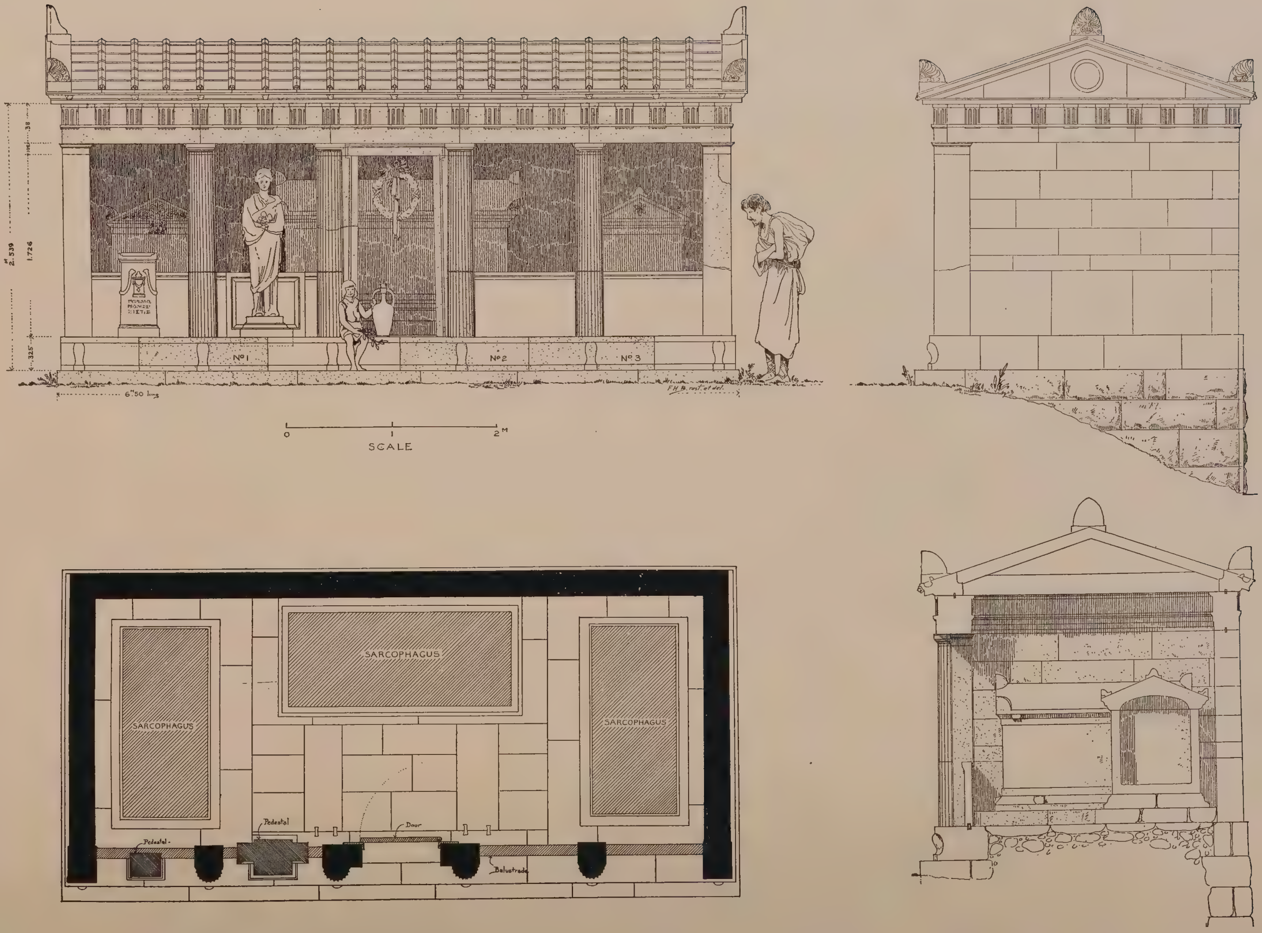


No. 1. Existing Plan

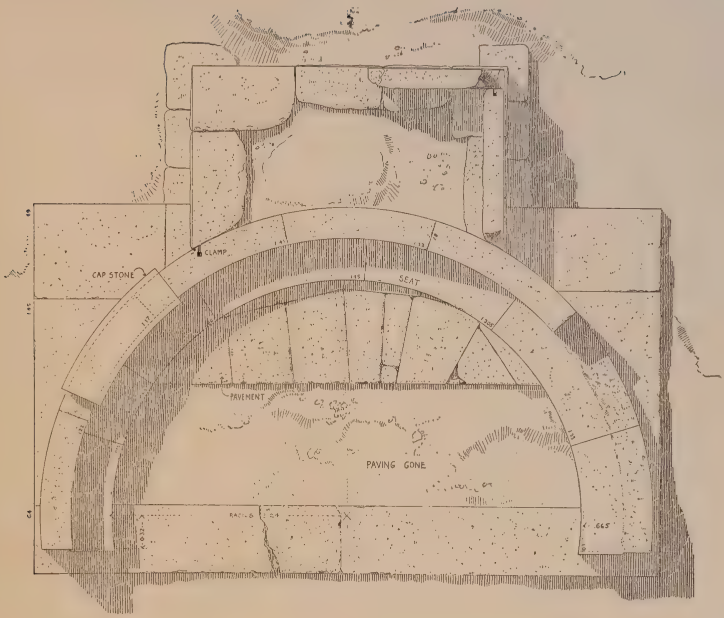
Drawing by Francis H. Bacon. The Tomb of Publius Varius.
From "Investigations at Assos."



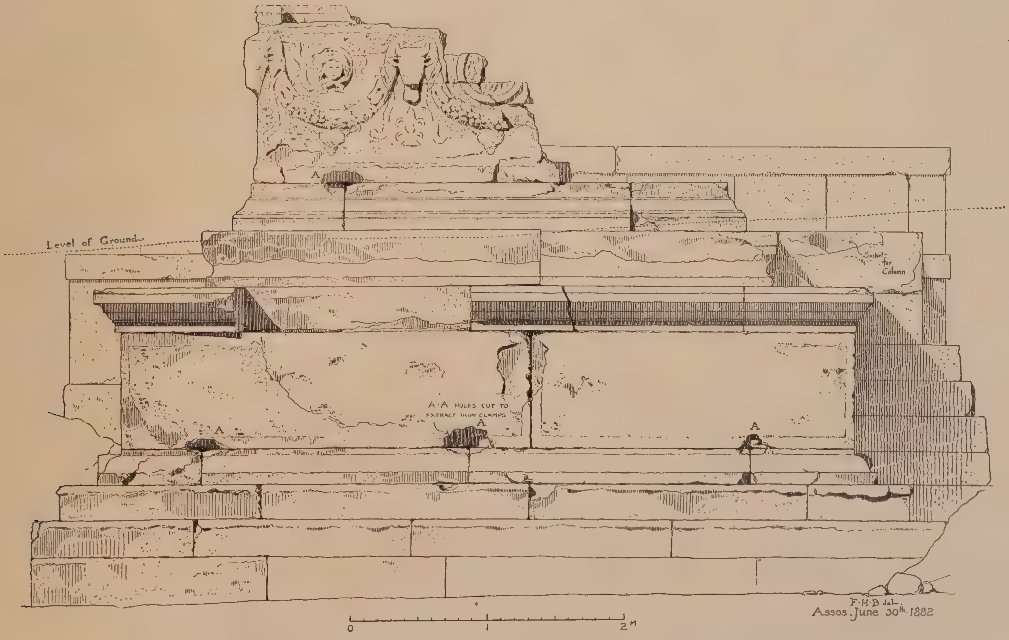
Drawing by Francis H. Bacon. Vaulted Tomb in Field (Perspective Showing Construction). From "Investigations at Assos."



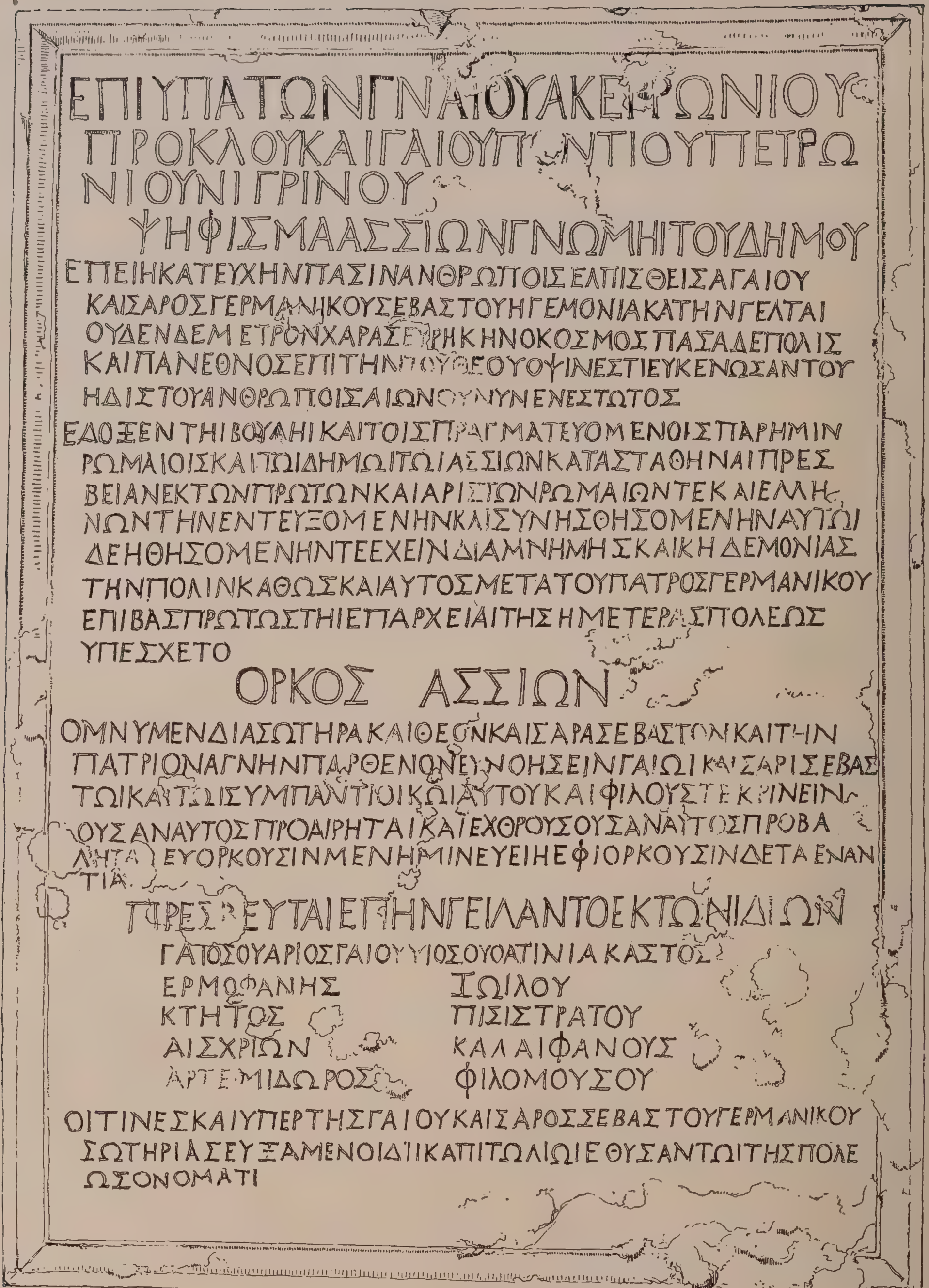
Drawing by Francis H. Bacon. Column Tomb, Restored. From "Investigations at Assos."



Drawing by Francis H. Bacon. No. VIII. Circular Exedra, Existing Plan. From "Investigations at Assos."



Drawing by Francis H. Bacon. Tomb No. XVI, Existing Condition.



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ΥΠΕΣΧΕΤΟ

ΟΡΚΟΣ ΑΣΣΙΩΝ

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ΤΙΑ

ΠΡΕΣΒΕΥΤΑΙΕΠΗΝΓΕΙΛΑΝΤΟΕΚΤΩΝΙΔΙΩΝ
ΓΑΙΟΣΟΥΑΡΙΟΣΓΑΙΟΥΥΙΟΣΟΥΟΛΤΙΝΙΑΚΑΣΤΟΣ

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ΚΤΗΤΩΣ	ΠΙΣΙΣΤΡΑΤΟΥ
ΑΙΣΧΡΙΩΝ	ΚΑΛΑΙΦΑΝΟΥΣ
ΑΡΤΕΜΙΔΩΡΟΣ	ΦΙΛΟΜΟΥΣΟΥ

ΟΙΤΙΝΕΣΚΑΙΥΠΕΡΤΗΣΓΑΙΟΥΚΑΙΣΑΡΟΣΣΕΒΑΣΤΟΥΓΕΡΜΑΝΙΚΟΥ
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ΩΣΟΝΟΜΑΤΙ

Drawing by Francis H. Bacon. Inscribed Bronze Tablet. From "Investigations at Assos."

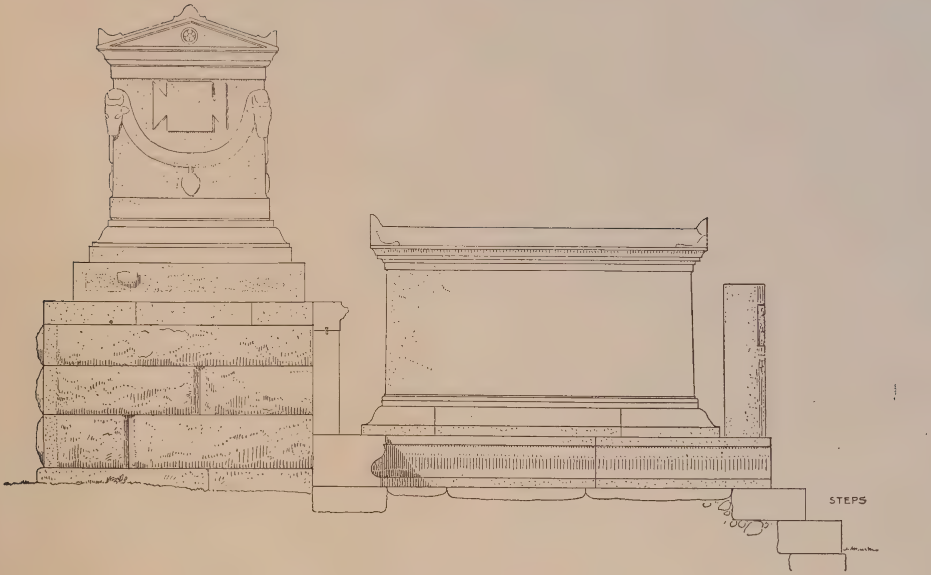
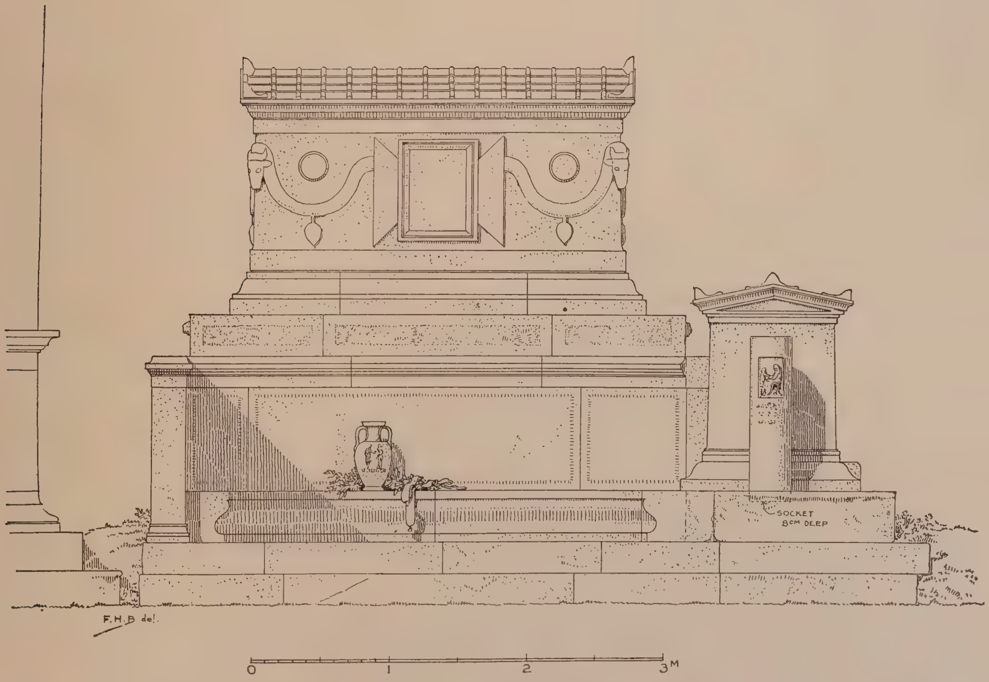
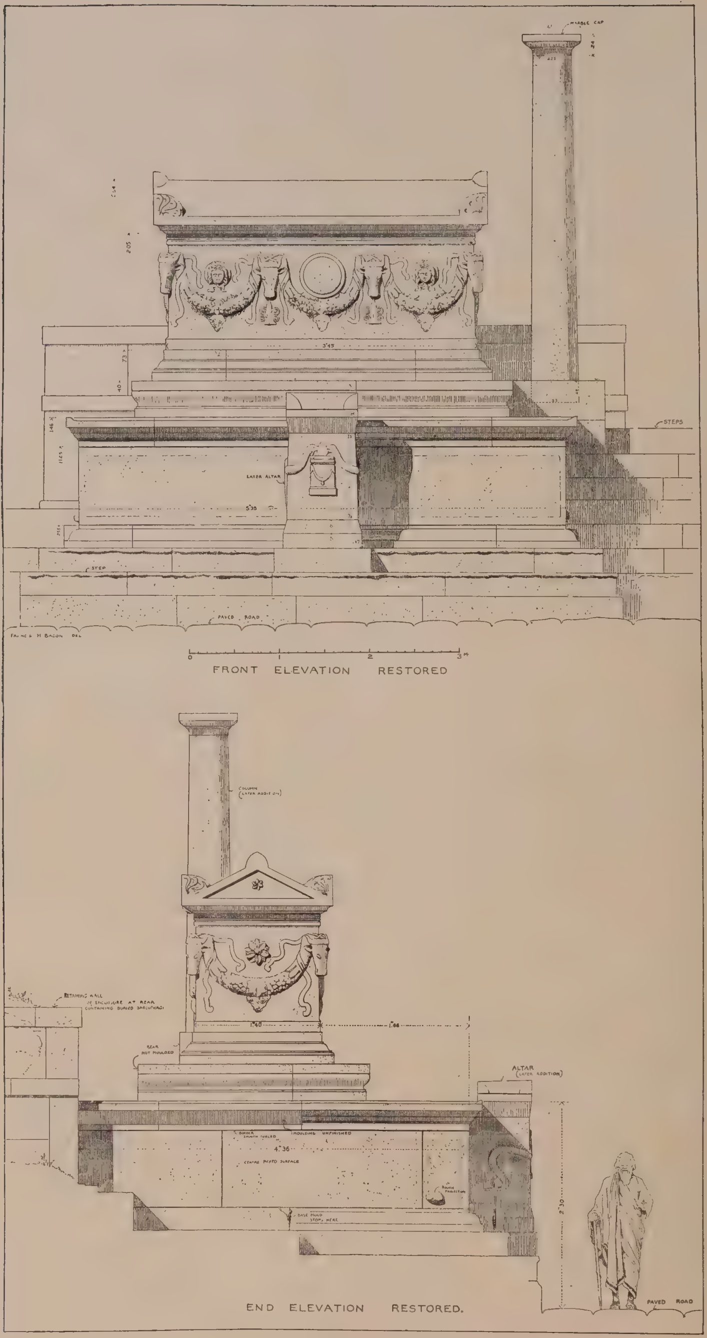


FIG. 1. SECTION RESTORED



Drawing by Francis H. Bacon. Tomb No. XI, Assos Street of Tombs.
From "Investigations at Assos."



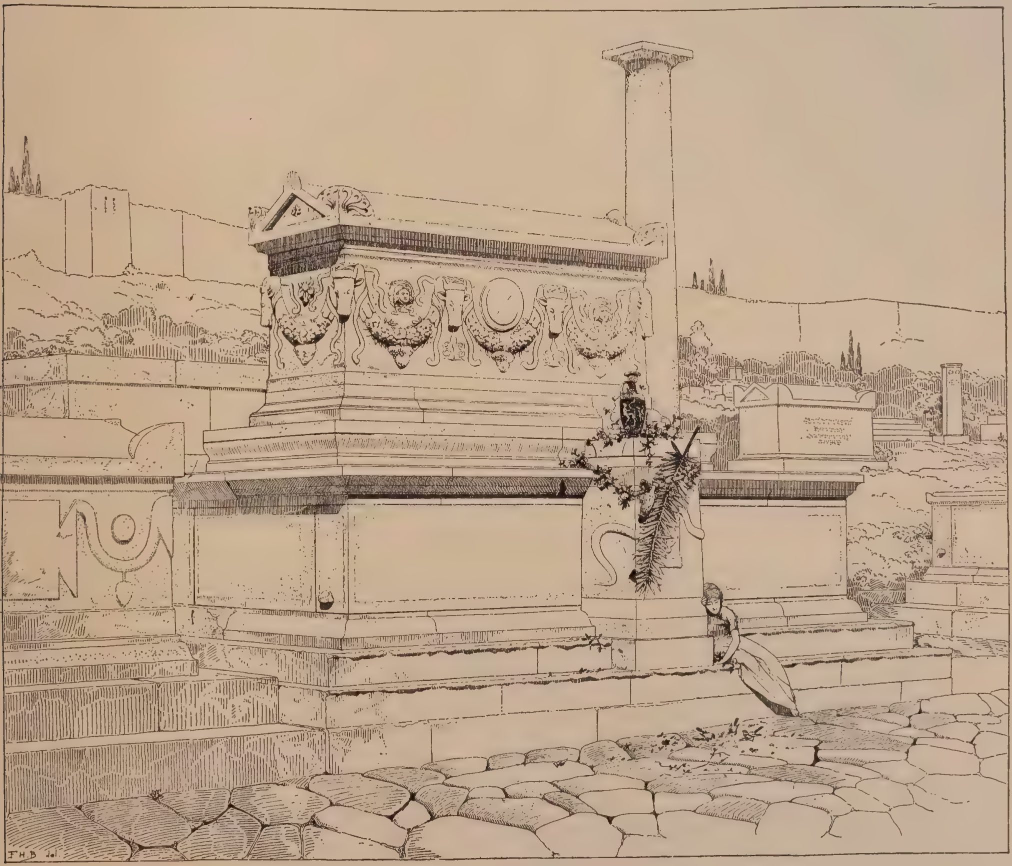
Drawing by Francis H. Bacon. Large Ornamented Sarcophagus.
From "Investigations at Assos."

Charles Eliot Norton of Cambridge, who was so much interested that he got a group of men together and formed the Archaeological Institute of America with the idea of exploring this or some other Greek site.

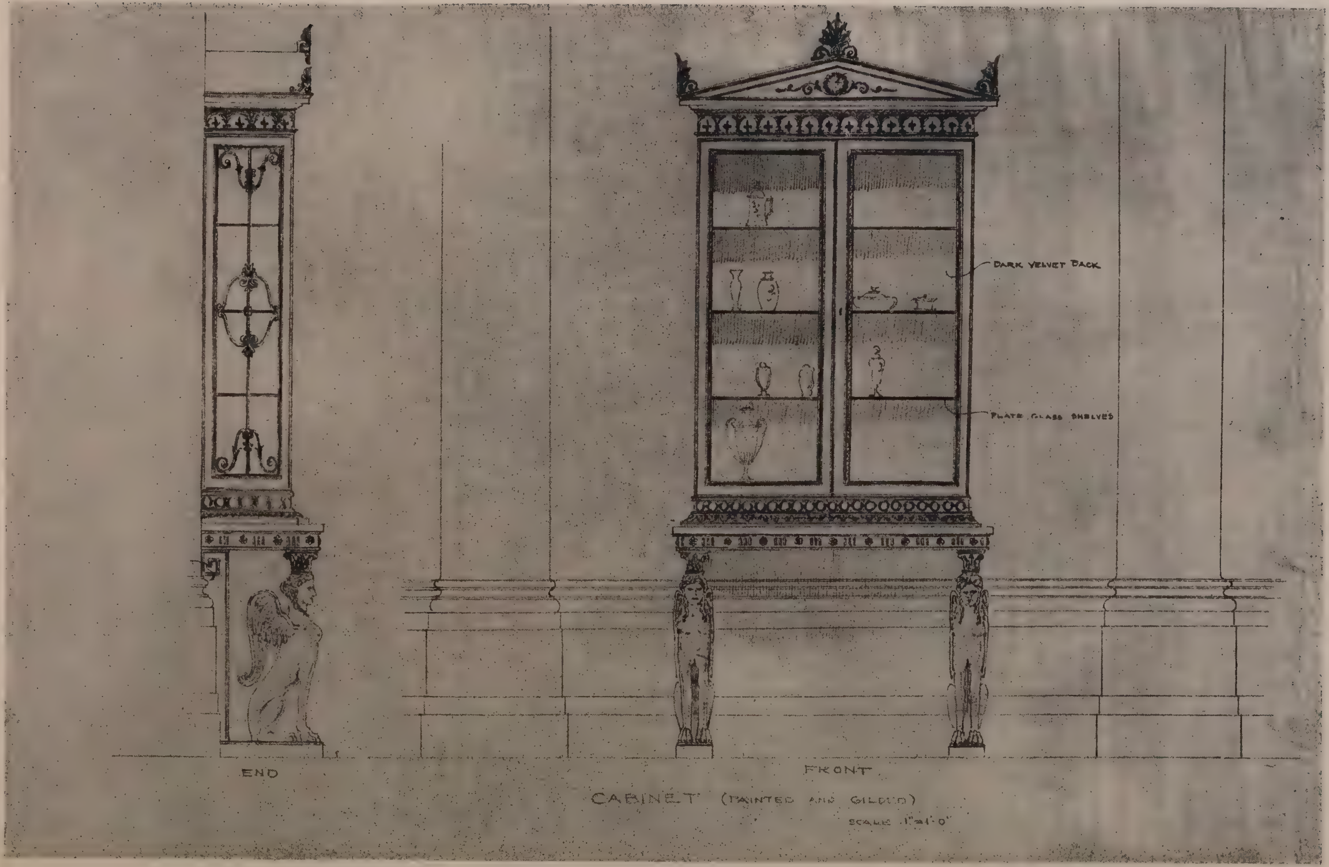
After various adventures by land and sea, visiting Samothrace, Ephesus, Samos, Delos, etc., Bacon and Clarke finally reached Athens with their little craft rather battered and their money all gone. So they lived aboard their small boat at the Piraeus going up to Athens every day until a friend provided the wherewithal to bring the pair of young adventurers back to America. Bacon landed in New York in December 1879 "stone broke but in good health and having had a famous experience."

He was lucky enough to land a job the next day in the office of McKim, Mead and White as a regular draftsman. The following summer, tempted by larger pay, he went with Herter Brothers, interior decorators, who at that time were designing and building two large houses for William H. Vanderbilt, on Fifth Avenue. Herter's drafting room was in charge of Charles B. Atwood and there Bacon found several young draftsmen who were afterwards to achieve distinguished reputations, C. Howard Walker, John P. Riley and Clarence H. Johnston, among several others. They used to meet evenings at each other's rooms and do sketch problems in design, the host giving the problem, furnishing the supper and keeping all the sketches. Among this company were C. H. Blackall, W. A. Bates and others, whose work has become nationally known.

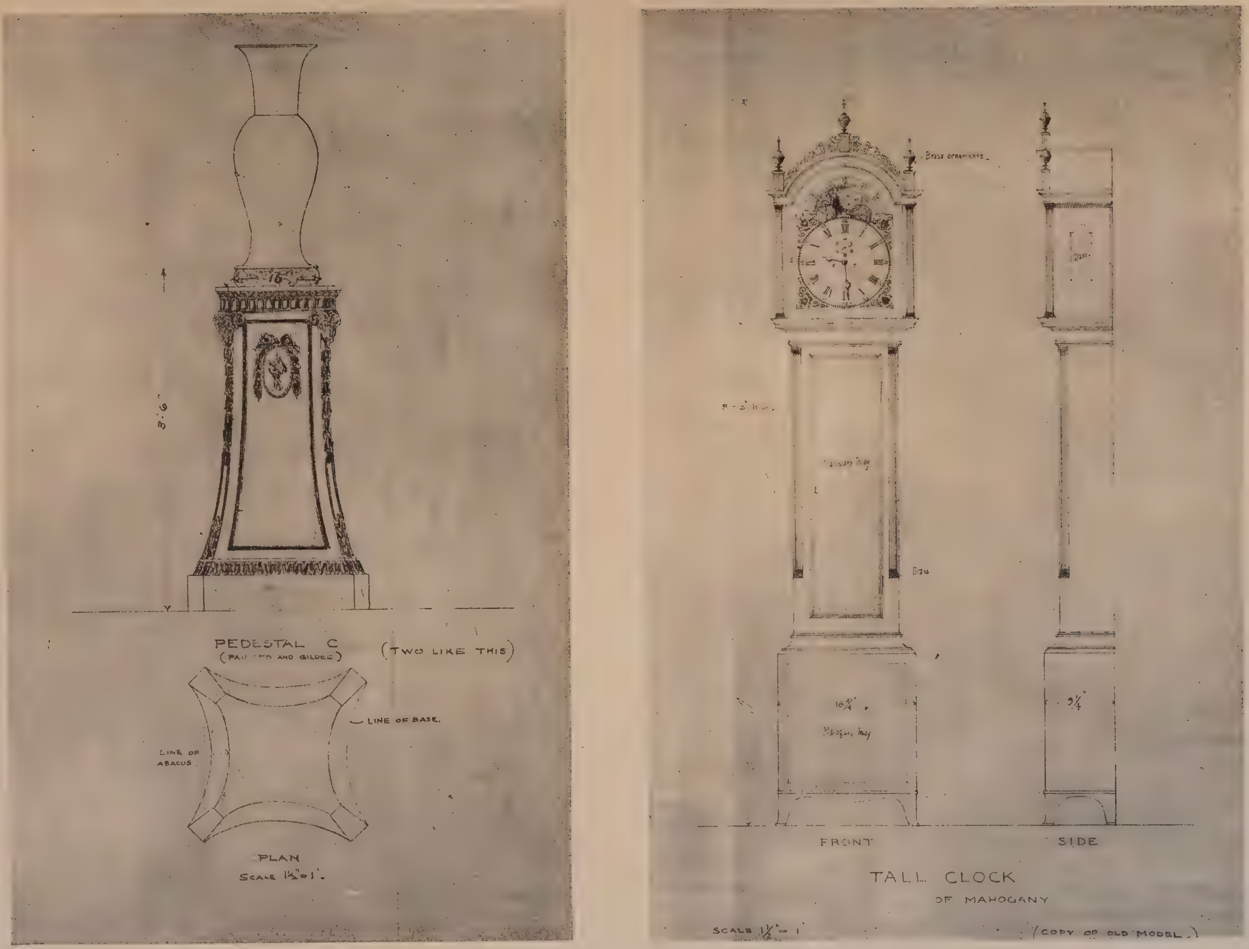
In the meantime the Archaeological Institute of America prospered and decided to excavate the site of Assos. Mr. Bacon was asked to join the expedition and finally consented and sailed again for Europe in January, 1881. Shortly before he left New York, Cass Gilbert arrived from Europe and started to work for McKim, Mead and White. He took Mr. Bacon's place in the little sketch club and so many others joined that a room was rented and



Drawing by Francis H. Bacon.
Tomb No. XVI—Restored. Large Ornamented Sarcophagus. From "Investigations at Assos."



Drawing by Francis H. Bacon.



Drawings by Francis H. Bacon.

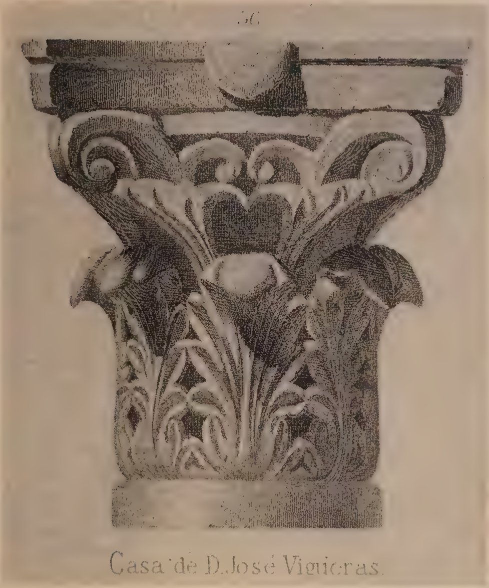
a society formed—which was named the Architectural League!

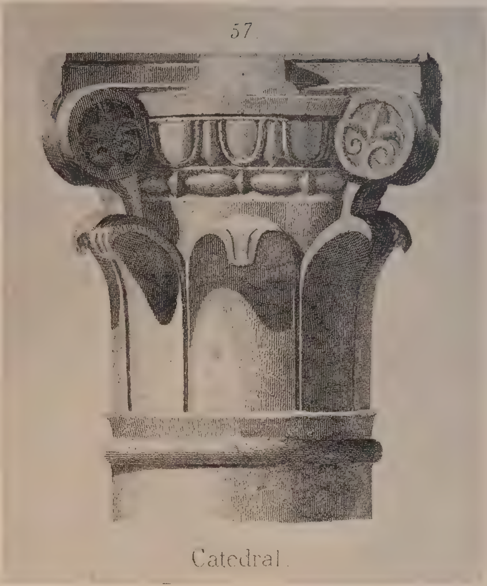
Mr. Bacon spent three years in Asia Minor where he was joined one summer by Mr. C. Howard Walker and the two spent the following winter together in Rome. Another winter was spent by Mr. Bacon at Athens. He finished his drawings of Assos in 1883 and entered the office of H. H. Richardson at Brookline the following year. Seeing the long road ahead before he could become financially independent in architecture he decided to give up the idea of covering the land with castles and town halls and go in for interior decoration and furniture. He entered the employ of A. H. Davenport Company of Boston and remained with them in charge of their designing until Mr. Davenport's death when he established his own business in 1908.

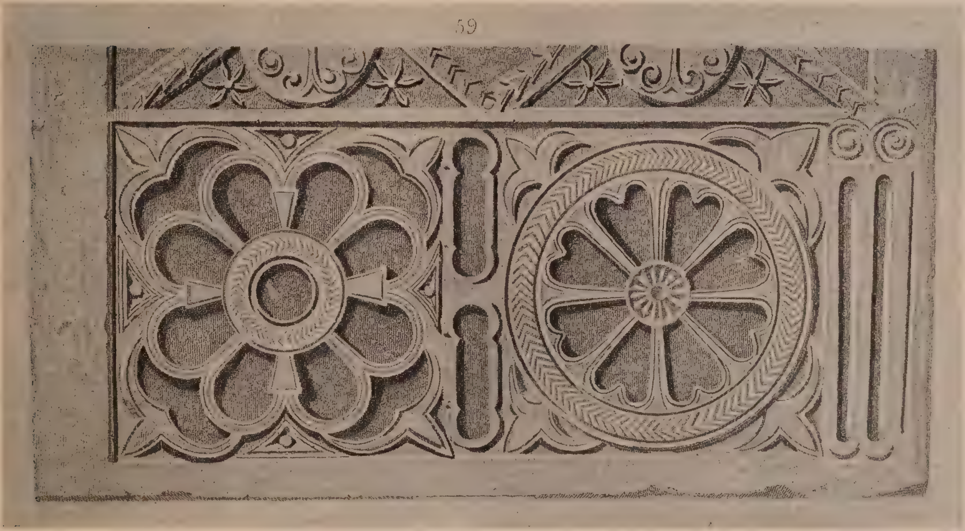
It is mainly since that date that Mr. Bacon's work has become generally known by architects and due to the remarkable distinction of his designs for furniture. While architects in the United States had long regarded furniture as "a factory product" or something "copied from the antique," the quality of Mr. Bacon's designing has been such as to remind us—and we have needed the reminder—that furniture plays an important part in architecture. What, indeed, would the domestic architecture of England be without it? The low, depressing rooms of the average English house, barren and dull in effect, receive the touch of the fairy wand when the dark-toned, well-formed lines of the dull polished furniture is brought in and put in place and the fires lighted; and the 18th Century French interior has, too, its center of interest in the beautifully proportioned and delicately decorated pieces of furniture. Then there are the collections of furniture in nearly all the museums of the world to prove the lasting popular interest in its beauty of design; and in the collections of drawings in museums are many designs for furniture; but I doubt that many possess as distinctive designs, so beautifully drawn as are contained in Mr. Bacon's files of his own studies. To many of us in the east, however, Mr. Bacon's personal influence in the cause of a high standard of design has long been known. His mastery of representation of the "glory that was Greece" was recognized in those early drawings which he made on the voyage with Clarke — a few of which were published from time to time in the eighties and nineties, and several of them together, as illustrations of "The Log of the Dorian" a dozen years ago, in the *Architectural Review*. His intimate study of Greek architecture has made him a leading authority upon the subject and one whose counsel and criticism has been sought by the very best of our scholarly designers of classical architecture, and obtained to their great advantage.

If the writer were called upon to dispense with his library except as much as he could carry under his arm, among the material that would surely be retained would be those reproductions of the drawings illustrating "The Log of the Dorian," made by Francis H. Bacon.

FRANCIS S. SWALES.

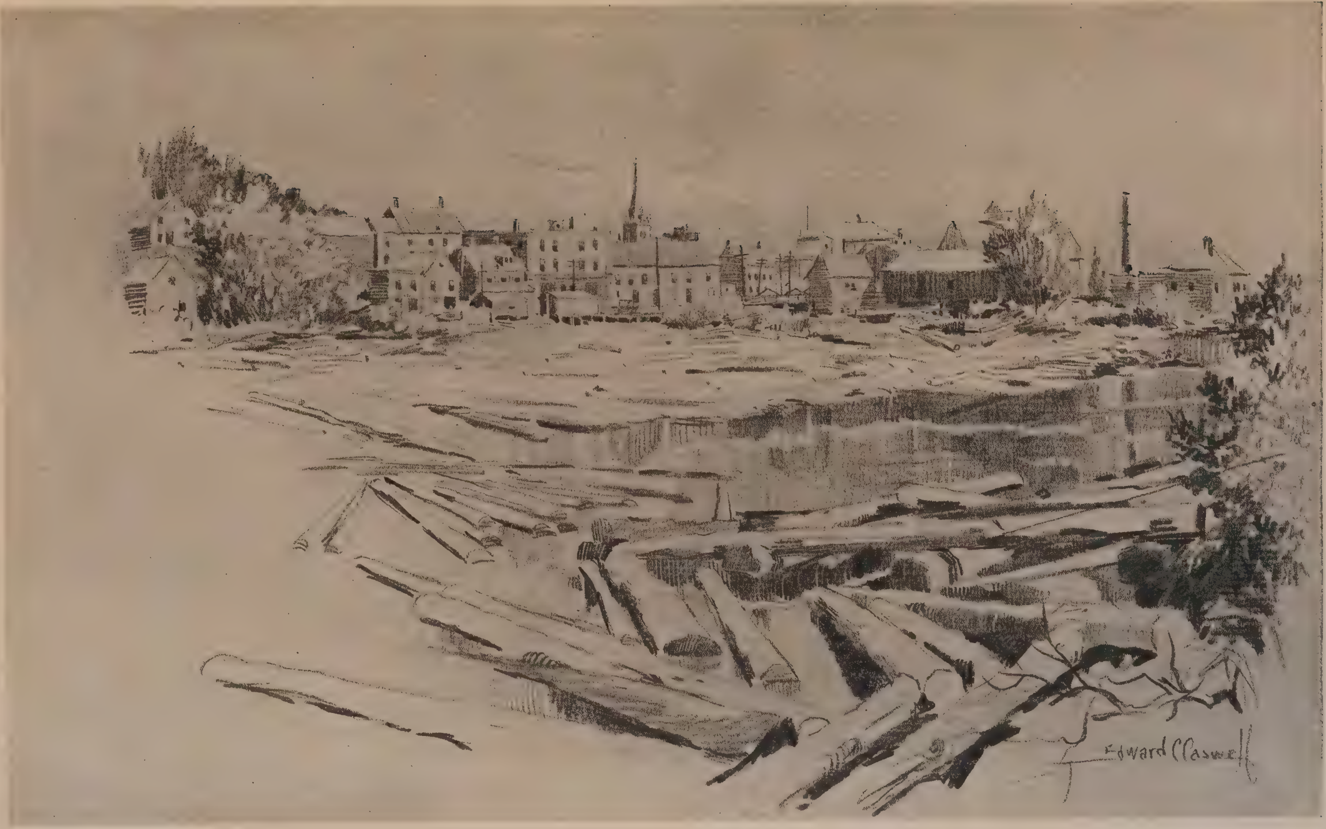

56.
Casa de D. José Vigueras.





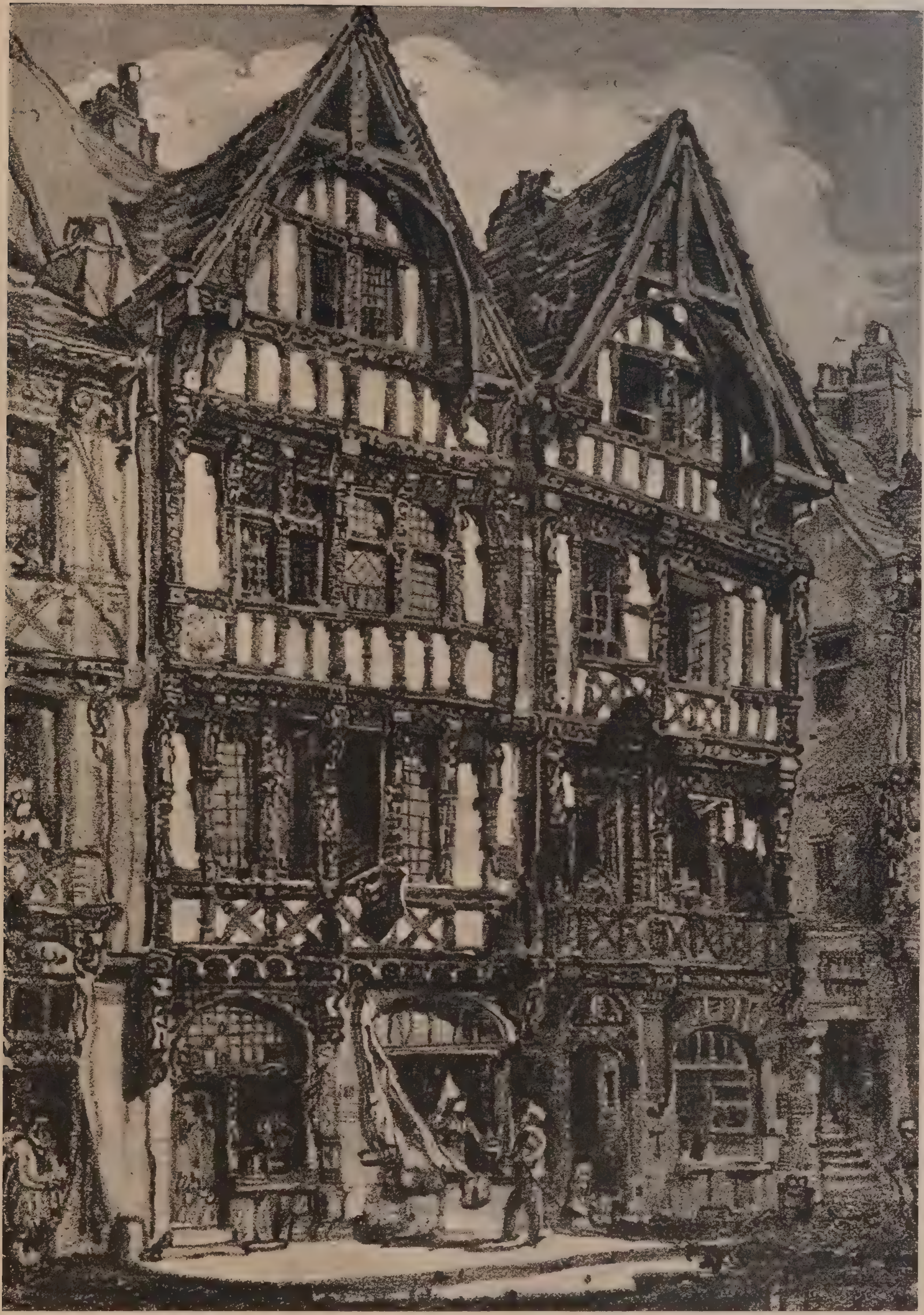
DETAILS IN THE CATHEDRAL AT CORDOVA
FROM "SPANISH MASTERPIECES OF ARCHITECTURE"

Three interesting bits of detail from the Cathedral at Cordova are shown on the other side of this sheet. This plate is one of the one hundred plates in "Masterpieces of Spanish Architecture," now being printed by the publishers of PENCIL POINTS. *This book will be Vol. IV of "The Library of Architectural Documents."*



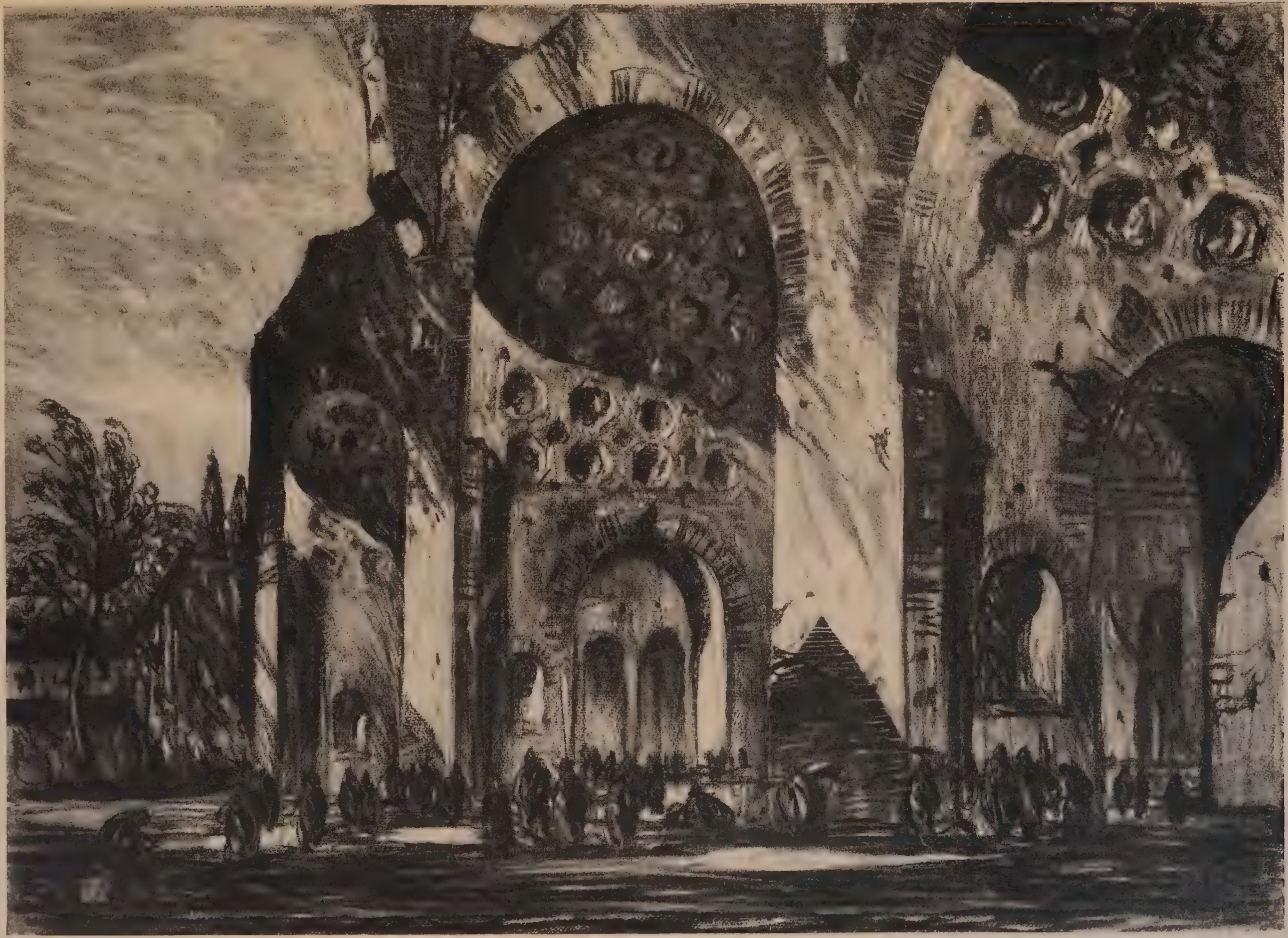
PENCIL DRAWING BY EDWARD C. CASWELL, EAST MACHIAS, MAINE.

On the other side of this sheet is reproduced one of the many interesting pencil drawings made by Edward C. Caswell for "Coasting Down East," by Ethel Hueston and Edward C. Caswell, Published by Dodd Mead & Co. This book is an account of a trip from Kittery to Calais.



DRAWING BY GEORGE D. CONNER. OLD HOUSES AT CAEN

The sketch reproduced on the other side of this sheet is done in lithographic pencil with the addition of Chinese white on brown paper. It shows two Fifteenth Century houses, at Caen, that are unusually rich in their timber-work detail.



CHARCOAL DRAWING BY FRANCIS KEALLY.
CONSTANTINE'S BASILICA IN THE ROMAN FORUM.

The charcoal drawing by Francis Keally reproduced on the other side of this sheet is an unusually effective representation of the Basilica of Constantine, Rome. It is one of the large number of drawings made by Mr. Keally during his recent travels abroad. It shows breadth, simplicity and strength of treatment that are excellent.

SHIPS AS ARCHITECTURE

BY FRANCIS S. SWALES

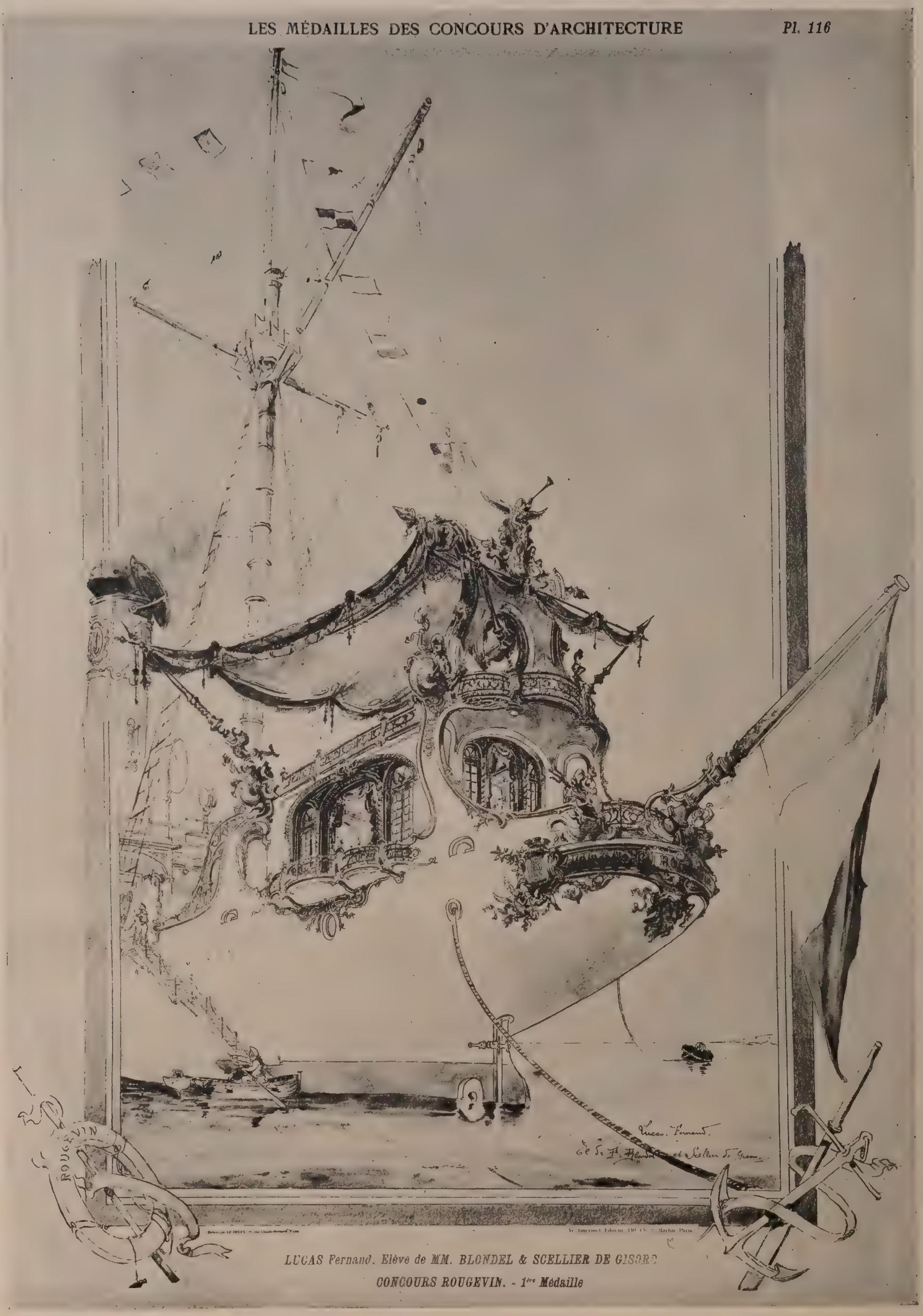
SOME people go to the pier to see a ship arrive, but most go to see her depart. Many do so without reference to friends aboard and only because of the fascination of the spectacle of the bringing to and making fast; or the loosing off and getting away of the large vessel. On our modern, busy, commercial piers, facilities are greater for seeing the vessel off than viewing her arrival; for the homeward-bound movement of arriving traffic tends to drive visitors to the pier ashore; while the outward bound movement occurs with the departing ship and the instinctive movement of the people left behind is towards the pier-head where the best view of the vessel may be obtained. The stern, therefore, becomes, in our time at least, the part of the vessel best adapted to decoration because it is the part most often looked at, and probably most often seen. It may account too, partly anyway, for the concentration of greatest elaboration on the sterns of ancient vessels.

Among the programs at the *Ecole des Beaux-Arts* one of those given out for the competition for the *Prix Rougevin* called for the design of the Decorative Composition of the Stern-End of a Naval Ship. It was supposed to be for the use of the *Ministre de la Marine,* or Secretary of the Navy, for excursions along the coast and for reviews of the navy.

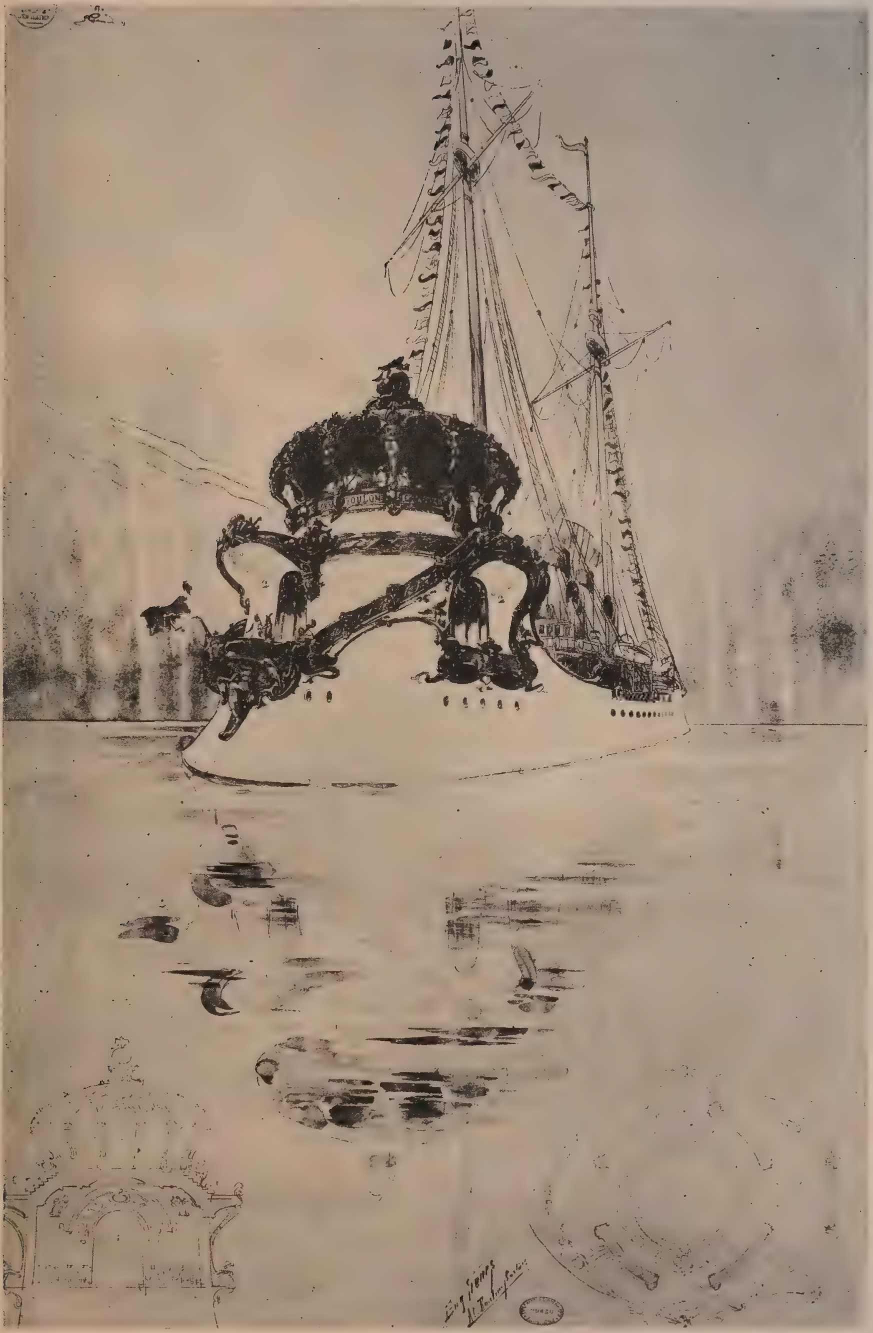
The French idea of architecture is to solve modern problems in a practical way in terms of beauty. In using the term "practical" I mean a good, convenient way—a simple plan—not "practical" in the commonly used American sense of something cheap, to exemplify which Mr. Cass Gilbert exclaimed of a proposed plan for the Development of New York City: "The *practical* thing to do would be to plant a row of geraniums around City Hall Park!" Therefore, the program specified that the treatment should be of a steel constructed steamship; that it was intended that it should serve at receptions and *fêtes,* during day and night. The part to be decorated in place of the severe aspect of a warship was to be a rich decoration appropriate to the special purposes of the ship. The *salon* was specified to be six metres wide (about 20 feet) and three high, and the bridge of the ship seven metres in width: that the exterior parts were to be of *"bois precieux"* and metal sculptured with emblems borrowed from and characteristic of things maritime; an exterior balcony above the rudder (!); exterior stairs leading to the floor of the *salon* a sort of belvedere overlooking the bridge: a rich pavilion to shelter the Chief of State and his circle of high personages.

The design by M. Eugene Senes which won the prize and another by M. Fernand Lucas, awarded a first medal, herewith reproduced, were among the most interesting in character of the hundred or more of solutions presented by the students. The program, evidently designed to force original thought, prevented, to some extent, the adaptation of the fine old sterns of some of the ships of bygone days, by the requirement that it should be applied to a *steel* ship. Nothing could be imagined more

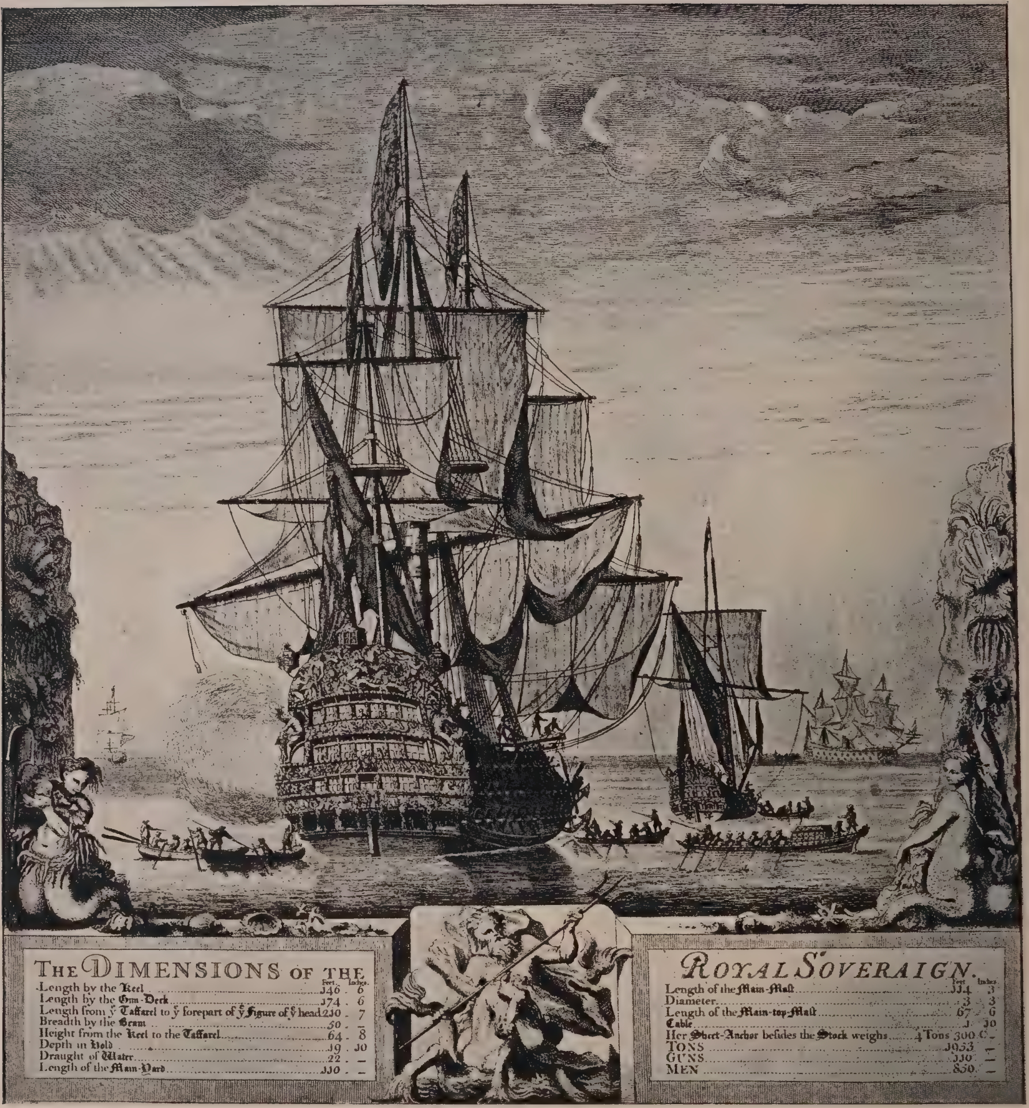
Reproduction of Christmas Card Used by the Prince of Wales in 1922. *Reproduced by the courtesy of Raphael Tuck & Sons, Ltd., London and New York.*


LES MÉDAILLES DES CONCOURS D'ARCHITECTURE
Pl. 116
ROUGEVIN
Lucas. Fernand.
LUCAS Fernand. Elève de MM. BLONDEL & SCELLIER DE GISORS
CONCOURS ROUGEVIN. - 1ère Médaille

Design for the Stern of a Ship by Fernand Lucas. Concours Rougevin.



Design for the Stern of a Ship by M. E. Sénès. Concours Rougevin.

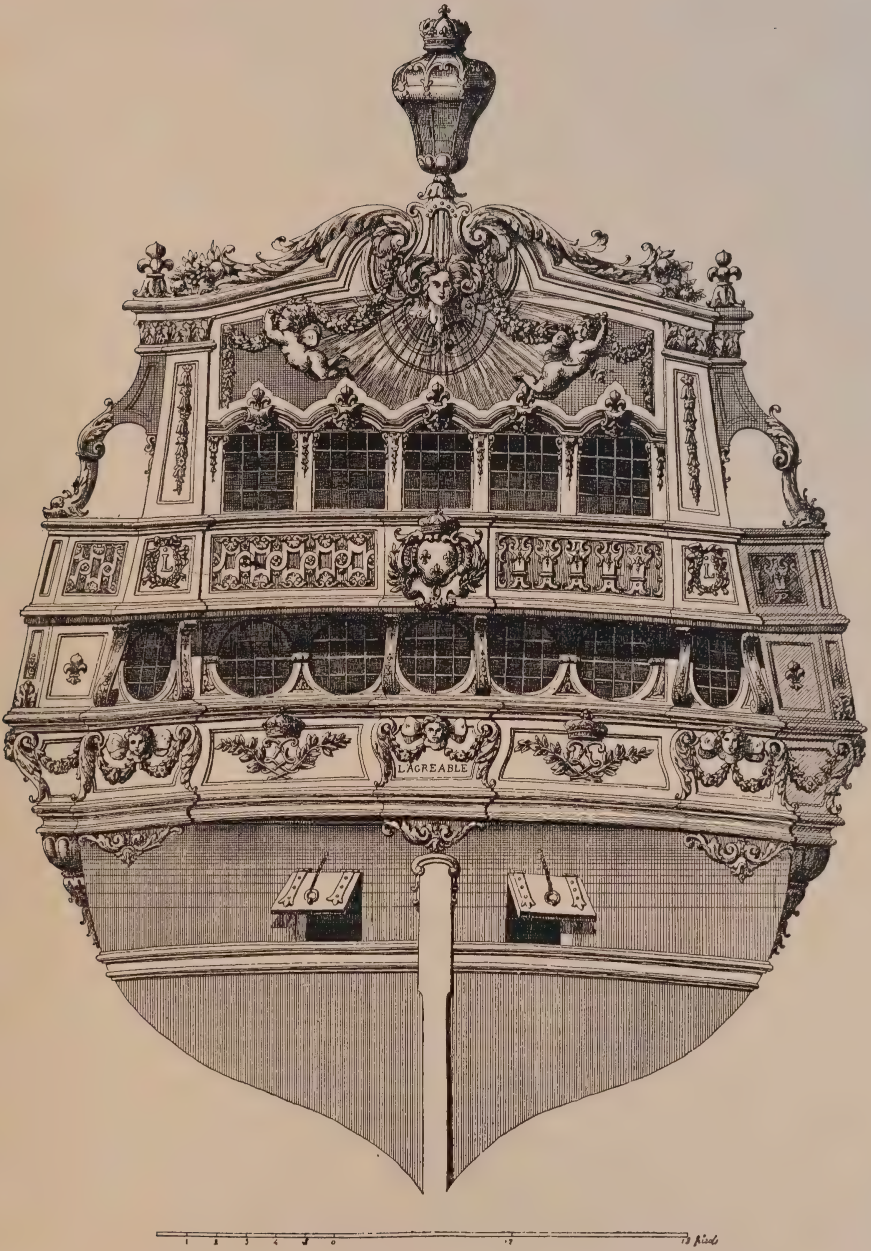


THE DIMENSIONS OF THE ROYAL SOVERAIGN.

	Feet.	Inches.
Length by the Keel	146	6
Length by the Gun-Deck	174	6
Length from ye Taffarel to ye forepart of ye Figure of ye head	210	7
Breadth by the Beam	50	—
Height from the Keel to the Taffarel	64	8
Depth in Hold	19	10
Draught of Water	22	—
Length of the Main-Yard	110	—

	Feet	Inches
Length of the Main-Maſt	114	3
Diameter	3	3
Length of the Main-top-Maſt	67	6
Cable	1	10
Her Sheet-Anchor beſides the Stock weighs	4 Tons 300 C	—
TONS	1053	—
GUNS	110	—
MEN	850	—

The "Royal Soveraign" Launched in 1637. From an Engraving by T. Baston.



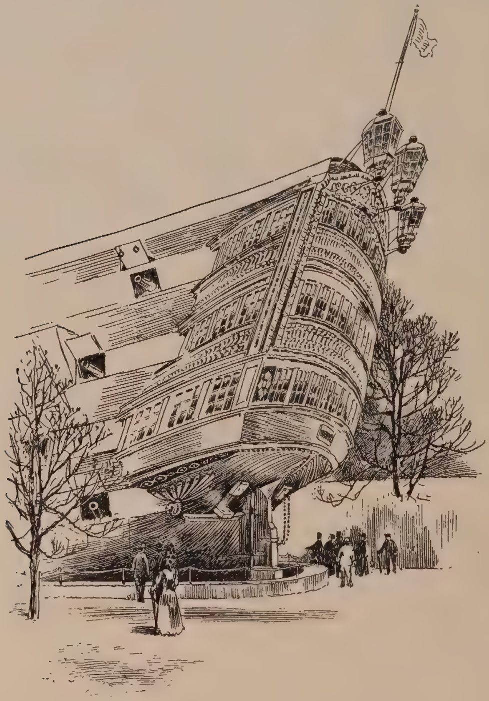
The Stern of "L'Agréable." Period of Louis XIV.

incongruous than one of those old wooden highbacks of the 16th to 18th century ships grafted upon a modern iron ship. Yet few things that can be found in architecture or decoration offer so much in the way of suggestion to the imagination for decorative use. Probably the earliest of the gorgeous ships were the Spanish threedeckers, or Galleons. Whether their sterns suggested or were suggested by the Spanish colonial architecture cannot be determined, but it seems probable that the earlier ships were designed after the fashion of the architecture of the period in the country in which they were built, and when seen in the colonial ports inspired ideas which the colonial architects—in the Netherlands for example—worked out in their houses in the forms of gables, bays, balconies, etc.

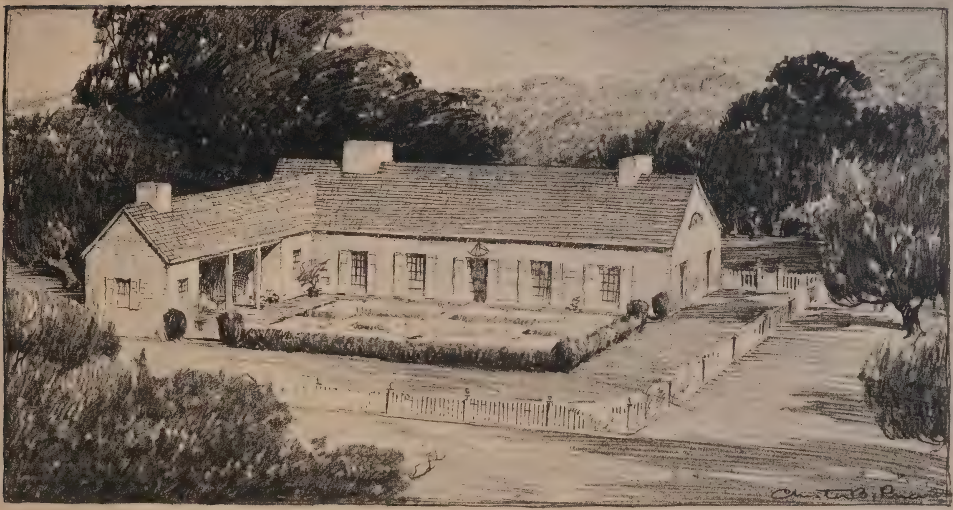
The ships of Genoa and Venice were probably very ornate. "Historical Novels" have made it appear that the English Crusaders were astonished at the richness and superiority of Italian ships of the period, but whether that is purely novelists' fiction, or an historian's supposed-to-be authentic story—"anyway it's a good story." Italian love of ornament and color is proverbial; and therefore color was probably applied as in their buildings, also in their ships. Renaissance decoration may have been first displayed to the British designers through the medium of the stern of the ship. Henry VII of England is said to have been keenly interested in ship-building; and at his period the English ship had developed into a sailing ship of considerable importance,—the larger ones being independent, or mainly so, of oars for propulsion; the galley had passed into desuetude. *"Great Harry,"* built to take Henry VIII to meet Francis I of France at the "Field of the Cloth of Gold" was a great ship of "1,000 tons burden and carried a crew of 700 mariners and soldiers including 50 'gonners'." The sails and pennants are recorded as having been "cloth of gold, damasked; that the quarters and sides, as also the tops, were fortified and decorated with shields bearing the Tudor and other devices." From the painting of this ship by Vincent Volfe at Hampton Court Palace, she appears to have a palatial arrangement of two or three stories divided fore and aft above the main deck; and probably three or more decks below that. This was the first attempt to build "the biggest ship built to date in England."

The Soverign of the Seas—or the *Royal Soverign,* built about 1637 was so elaborate and costly (about $200,000 in nominal present-day cash but relative to the purchasing power of the times an amount that would correspond to two or three million dollars now), said to have been one of the contributary causes of the execution of King Charles. A beautiful model of this ship made by Mr. Henry Culver, assisted by Mr. Paul Chalfin, was shown at the Architectural League a year or two ago. It showed a

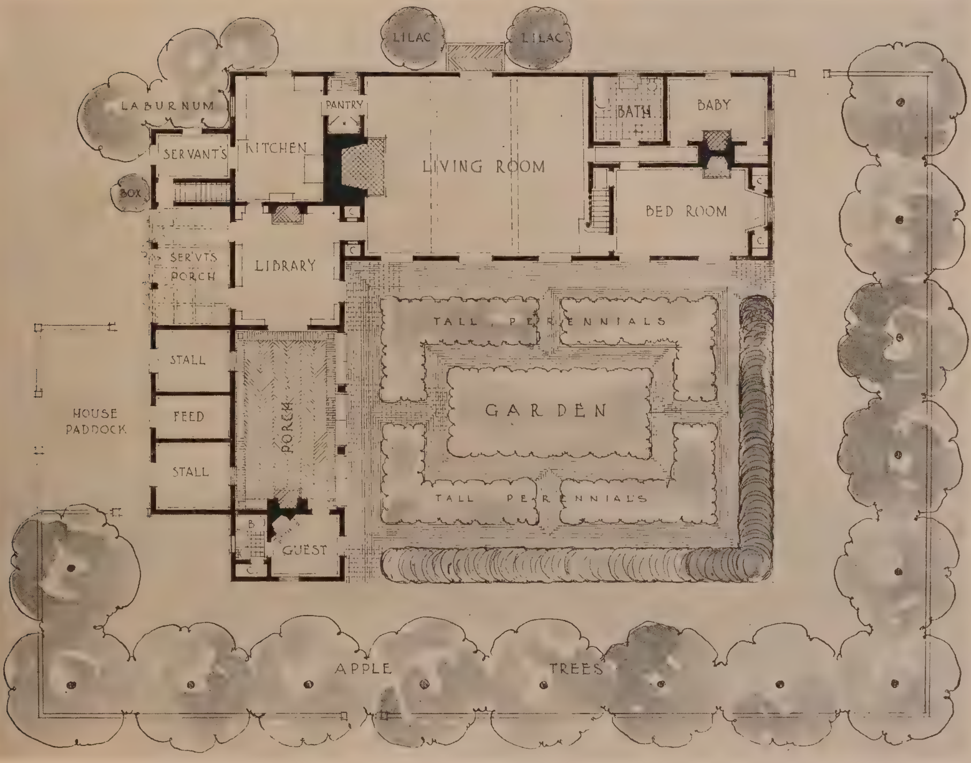
(*Continued on page* 74)



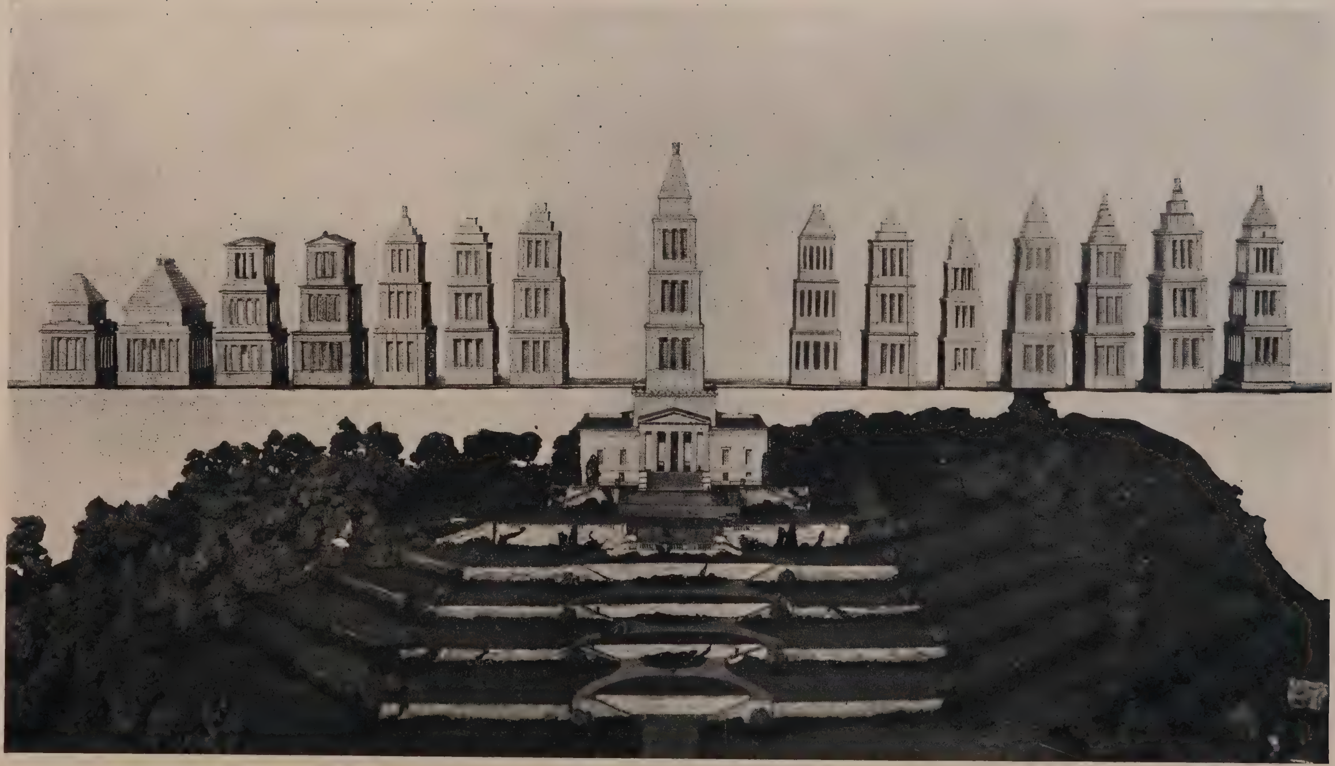
Sketch by T. Raffles Davidson.



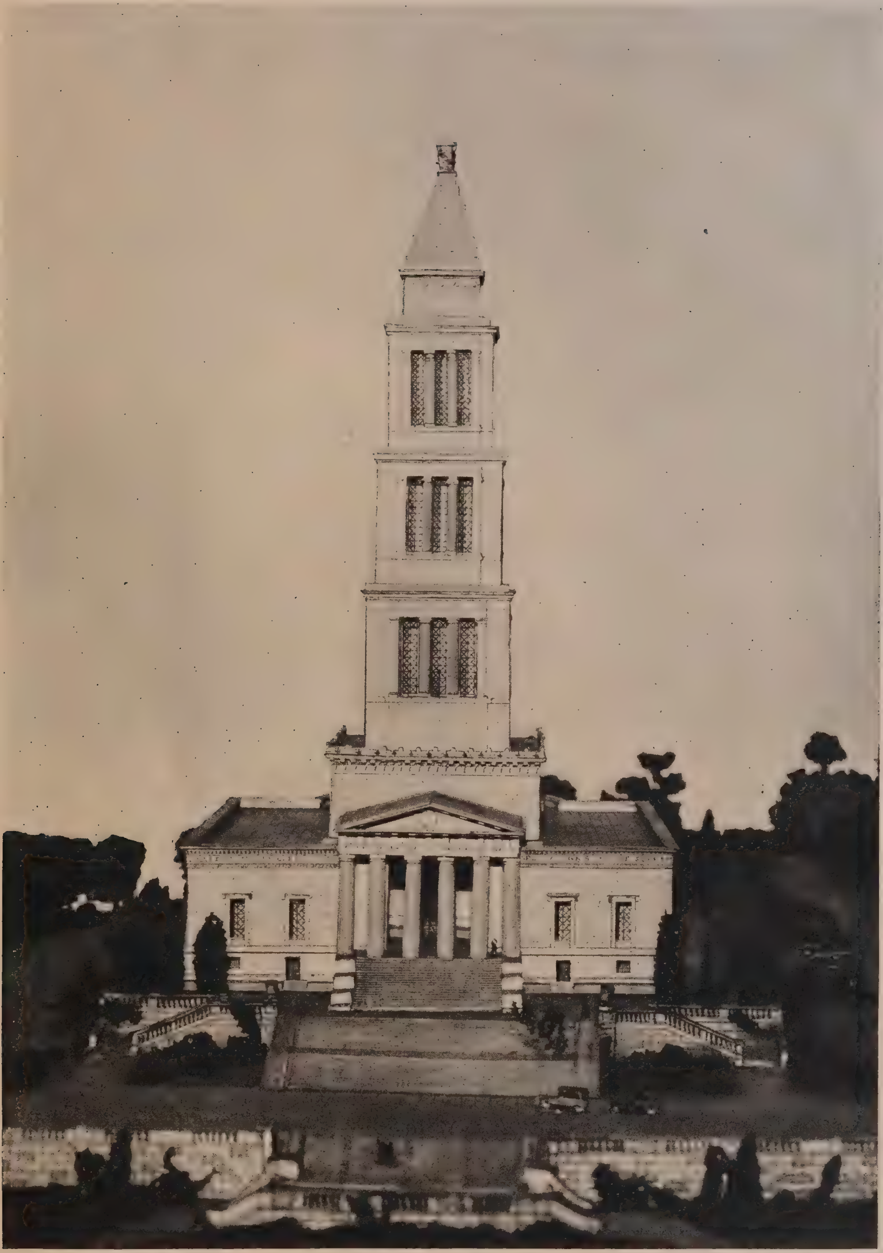
Rendering by Chester B. Price.



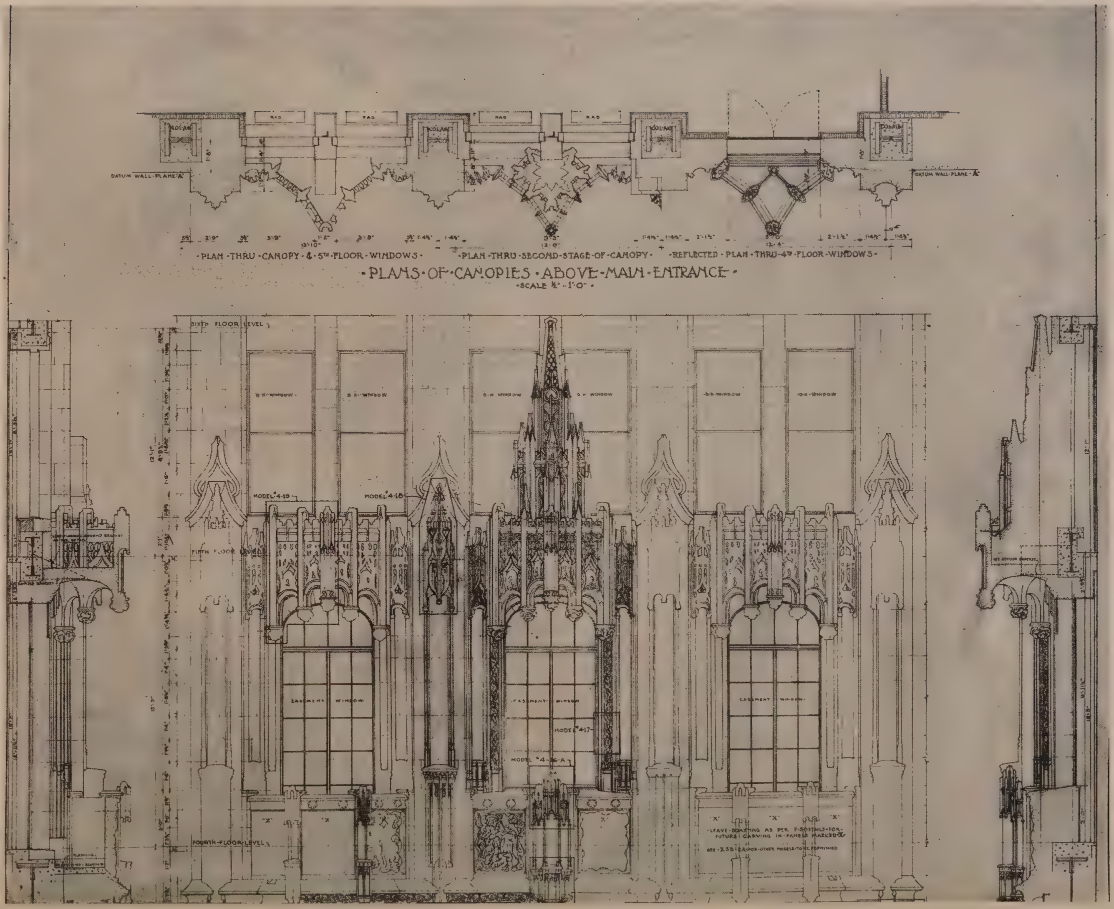
House for Mrs. J. Watson Downes at Locust Valley, New York. Eric Gugler, Architect.



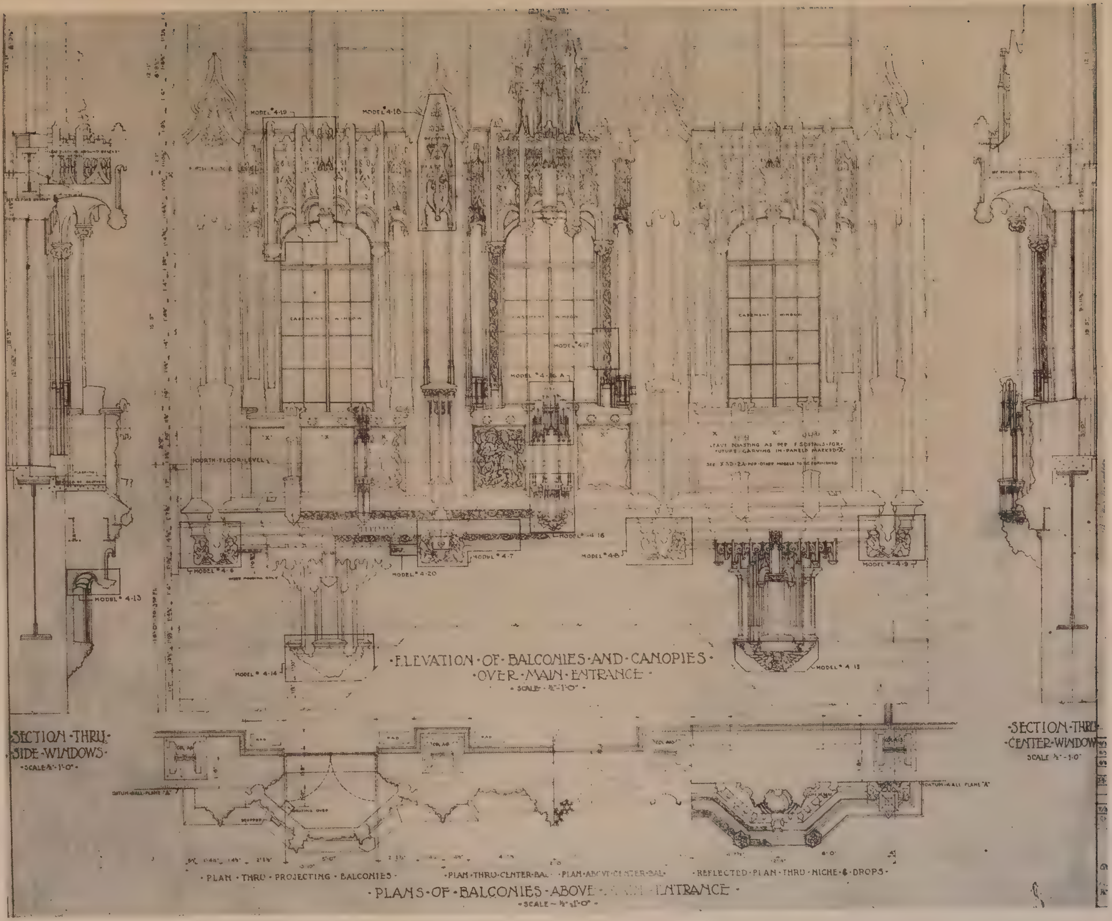
Model of George Washington Masonic National Memorial at Alexandria, Va. Helmle & Corbett, Architects.
(Various designs for upper portion are shown.)



Model for George Washington Masonic National Memorial at Alexandria, Va.
Helmle & Corbett, Architects.


DATUM WALL PLANE "A"
RAD
COL. A
PLAN · THRU · CANOPY · & · 5TH · FLOOR · WINDOWS ·
PLAN · THRU · SECOND · STAGE · OF · CANOPY ·
REFLECTED · PLAN · THRU · 4TH · FLOOR · WINDOWS ·
· PLANS · OF · CANOPIES · ABOVE · MAIN · ENTRANCE ·
· SCALE ½" - 1'-0" ·
SIXTH FLOOR LEVEL
FIFTH FLOOR LEVEL
FOURTH FLOOR LEVEL
D.H. WINDOW
CASEMENT WINDOW
MODEL 4-19
MODEL 4-18
MODEL 4-17
MODEL 4-16-A
"X"
· LEAVE · BOASTING AS PER F.S. DETAILS · FOR · FUTURE · CARVING IN · PANELS MARKED "X"

Details of Construction—Canopies Above Main Entrance, Building for the Chicago Tribune.
John Mead Howells and Raymond M. Hood, Associate Architects.



Details of Construction—Balconies and Canopies over Main Entrance, Building for the Chicago Tribune.
John Mead Howells and Raymond M. Hood, Associate Architects.

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UNIVERSITY OF WASHINGTON, SEATTLE

WE have an architectural club called the Atelier; membership includes all the students in the department who have successfully completed the first year.

The purpose of the club is to promote a high standard of scholarship, good fellowship and mutual assistance among the members. It gives three parties each year and has numerous trips and meetings at which speakers are entertained.

One of the traditions of the department is a banquet, one at the beginning and one at the end of each year, for the particular benefit of the freshman class, at which the year's work is planned and reviewed.

The officers of the Atelier for the past year were: Massier, Wm. B. Glynn; Secy., Nell Strohn; Treas. E. W. Osgood.

In June of this year the Iota chapter of Tau Sigma Delta, national, honorary Architectural fraternity, was installed at the University of Washington. The charter members of the chapter are Prof. C. F. Gould, Prof. A. P. Herrman, Henry B. Hoover, J. T. Jacobsen, V. N. Jones, J. I. Mattson and Wm. B. Glynn.

SHIPS AS ARCHITECTURE

(*Continued from Page* 68)

very elaborate stern similar to a picture in the National portrait gallery, but apparently with somewhat less lean-home, and without the figures or the flying buttress-like engraving herewith reproduced; but it is in accord with and may have assisted in, the design of the *Soverign* as shown on the Christmas Card of the Prince of Wales after his world trip of 1922. The lines are rather hard, stiff and architectural as compared with French ships of the same and later periods, but the lines of the upper part are much more pleasing than later British ships, for instance, the *Victory*—Nelson's famous flagship—which has the appearance of a lopsided barn with an elaborate bow-window projecting at odd angles and somewhat bent or twisted to intersect with its sides. The illustration of the *Victory* assists in understanding designs such as the stern of *L'Agréable* shown by a drawing of the period of Louis XIV of France. It seems probable that the bottom line of the drawing was a line of intersection with the hull; for the gun ports would be well above the water line and there would surely be more of the hull below than the drawing indicates.

CHARLES H. DORNBUSCH

CHARLES H. DORNBUSCH, winner of one of the Princeton University School of Architecture Prizes, was born in New York City and received his early education there. His first experience in an architect's office when a student, and later a draftsman, was with Mr. Elliott Lynch. Since that time, 1917, he has been with F. F. French Co., G. Howard Chamberlain in Yonkers, and with Helmle & Corbett where he is now employed. Mr. Dornbusch feels that when he came under the influence of such men as Harvey W. Corbett, John V. Van Pelt, Maurice Prevot and A. E. Flanagan at the Columbia School of Architecture he began to learn of what the substance of architecture consists and he attributes to the influence of these men any advancement he has made since he entered Columbia. Mr. Dornbusch will go to Princeton in the fall, where he will reside at the Graduate College.

POLYCHROMY

POLYCHROMY, Architectural and Sculptural Theory and Practice, by Leon V. Solon, with introduction by Ralph Adams Cram. 156 pages of text, numerous half tone illustrations and 9 full page color plates. The Architectural Record, New York, 1924, price $6.00.

Mr. Solon was well known as a colorist and designer in ceramics before he left England to direct the polychrome work of the American Encaustic Tiling Company in New York. In matters pertaining to color he speaks with the sensitive perception of the artist as well as with the informative knowledge of the profound and painstaking student. In this book he is a pioneer for nothing as yet appeared so instructive and suggestive to the designer who desires to use color in architecture. His investigations and the principles he evolves are confined to Greek polychromy as he considers the art of the Sixth and early Fifth centuries, B. C., the most systematized and scientific in its use of color and the one most applicable to modern uses. The illustrations are reproduced from sources whose reliability are beyond question and are so excellent and profuse that the volume will be found of the greatest value to the draftsman as well as to the unfortunate architect who may be inoculated with "book-collectors disease." The last chapter contains a valuable descriptive bibliography of works on Greek Architectural and Sculptural polychromy.

THE DRAFTSMAN WITH A JOB

Dear Sir:

WE have read with interest the remarks of Mr. Samuel N. Crowen, Architect, regarding the practice of draftsmen doing work on the side and the complaint from the employer's point of view and the query for a solution of this problem.

There is no question but that this practice is most harmful to the profession, the "client" and the draftsman architect.

The blame may squarely be put on the shoulders of the architect who employs draftsmen to work "for" him at a salary insufficient to make him satisfied to work "with" the "boss" or firm and on the client who is looking for services at cut rates.

We have found ourselves in this situation, realizing the harm to ourselves as well as the other parties concerned, did the next best and proper thing by setting up our own business.

Such architects who seek to employ men at the "lowest salary they would consider" who produce a large part of the profits of the business but receive no share of same, cannot expect them to take a great interest in the affairs of the firm and cannot blame them for attempting to do for themselves what is being done by the firm. Of course where a man is well paid and made to feel that he is working with the firm, there is no excuse for taking work away from the office. However in our experience these instances are rare. In the majority of cases architects' best ideal draftsmen are those who can be hired and fired like common labor, and even the latter cannot be treated thus nowadays.

While some firms take in a few designers and capable executives, as far as the draftsman is concerned, it is up to him to look out for his own advancement in the firm or outside, returning such "honest" or "ethical" treatment as accorded him.

This is a problem that every business must contend with, one that will always be with us under present forms of business organization and operation and to which there is no solution other than to fire the man if he does not suit you.

Harry Lucht

PERSONALS

Bryon B. Harper, will continue the practice of architecture at 205-7 Scott Lothrop Building, Alhambra, Cal. The architectural firm of Wright and Harper, of Alhambra, has been dissolved.

Louis T. Rouleau, Architect, has removed his offices to 927 15th Street, N. W., Room 901, Washington, D. C.

Shea & Shea, Architects, have removed their offices to 454 Montgomery St., San Francisco, Calif.

Alfred Granger, Elmo C. Lowe and **John C. Bollenbacher**, have formed a partnership to continue the practice of architecture under the firm name of Granger, Lowe and Bollenbacher, with offices at 332 South La Salle Street, Chicago.

Robert Swartburg, Architect, has removed his offices to 2 West 46th Street, New York City.

Paul Verone Marquette, of Paris, has become affiliated with Mr. Swartburg as head draftsman.

L. T. Bengston, of Boston, Mass., and Richmond, Va., has been taken into the former firm of Wysong and Jones. Mr. T. P. Jones has retired and the firm name has been changed to Wysong & Bengston, with offices in the Professional Bldg., Charleston and at Princeton, W. Va.

F. Earl DeLoe, Architect, has removed his offices to Melbourne, Fla.

Elmer P. Merkle and **William J. Elberth** have formed a partnership for the practice of architecture, with offices at 565 Fifth Avenue, New York City.

Henry J. Moloney, Architect, will continue to practice architecture at 342 Madison Avenue New York, the firm of Moloney and Hallahan having been dissolved.

Edward M. Adelsohn, Architect and **Engineer**, has removed his offices to Rooms 404-406, Municipal Bank Office Building, Brooklyn, N. Y.

Harry Kirshbaum, Architect, has removed his offices to 25 West 43rd Street, New York City.

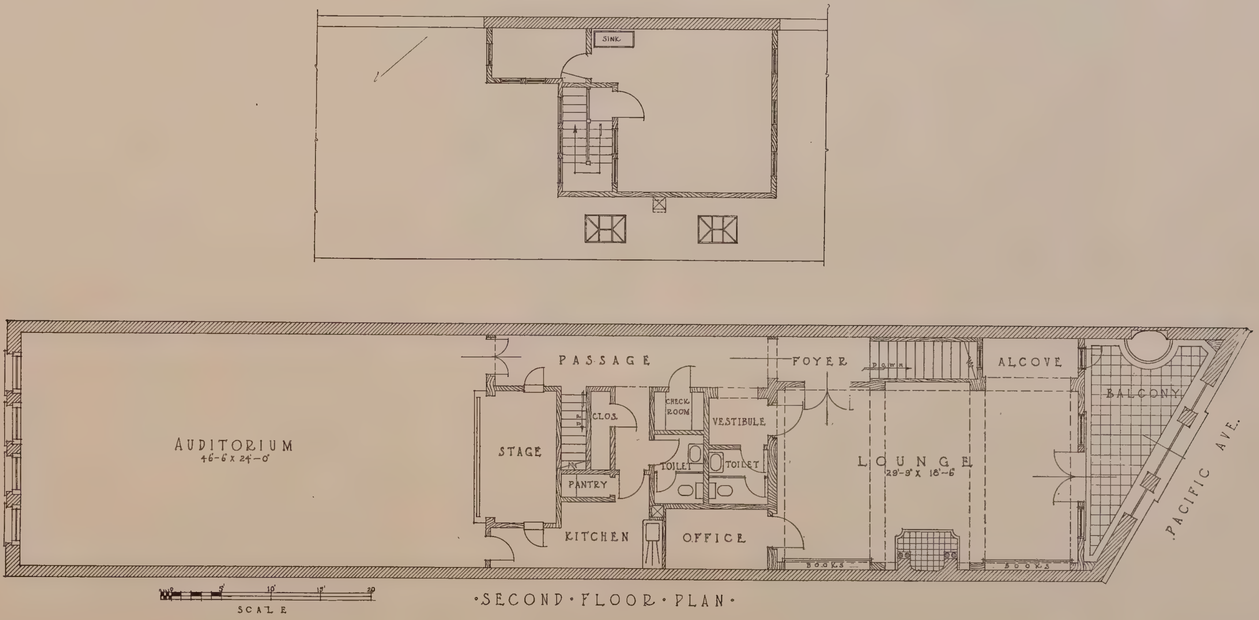
Jerome F. Wood, Architect, has former a co-partnership under the firm name of Wood & Drechsler, with offices at 305 National Bank of Rochester Bldg., Rochester, N. Y. The firm of Brockett & Wood has been dissolved.

Butterfield & Butterfield, Architects, have removed their offices to 306 Wesley Bldg., 2847 Grand River Avenue at Sixth and Temple, Detroit, Michigan.

WILLIAM DOUGLAS

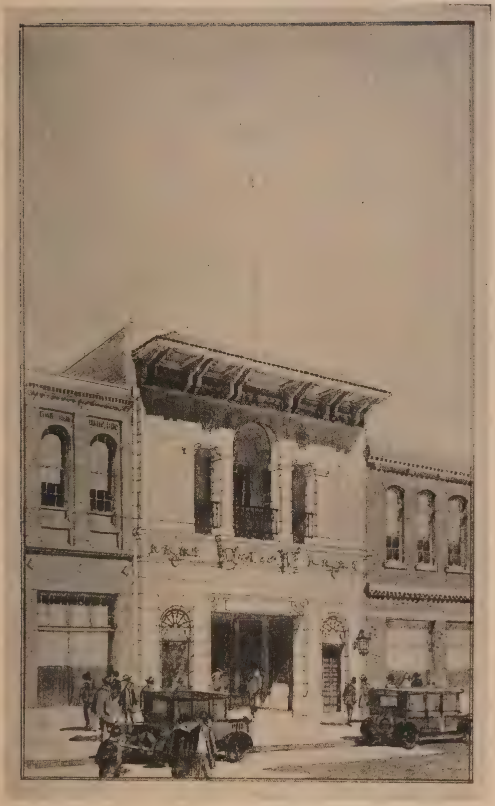
WILLIAM DOUGLAS, of the Yale School of the Fine arts, has been appointed Fellow in Architecture by the American Acdemy in Rome. The award was made on a competitive basis; an eleven day preliminary competition was followed by a final one lasting four weeks. For the first competition the problem assigned was "A Home for Disabled Soldiers," to be designed as a war memorial. Of the fourteen preliminary competitors, seven were chosen for the finals, in which the subject was "An American Embassy in Rome." This competition was held simultaneously at Columbia, Cornell, University of Pennsylvania and Yale. The members of the jury of award were Messrs. Breck, Trowbridge, W. M. Kendall, Louis Ayres and W. A. Delano.

Mr. Douglas was graduated from Yale College in 1918 with the B.A. degree, and in 1923 with the degree of B.F.A., from the Yale School of Fine Arts. He has been in the offices of Murphy & Dana, and Bradley Delehanty, both New York City firms. During the War, Mr. Douglas spent eighteen months in France with the Yale Mobile Hospital Field Unit. This year he was awarded the Individual Student Medal by the *Groupe Americaine des Architectes Diplomé par le Gouvernment Français.* The stipend of the Fellowship is $1,000 a year and Mr. Douglas will remain at the Academy in Rome, where he will go October first, for a term of three years.



•SECOND•FLOOR•PLAN•

Plan of New Home for the Dallas Architectural Club, Dallas, Texas.



The New Home of The Dallas Architectural Club.

DALLAS ARCHITECTURAL CLUB

THE Dallas Architectural Club, after a period of comparative quiet, is finally breaking back into the big leagues with the letting of a contract for its new home—a perspective of which is shown in this issue. The story of the long, hard drag up to this point is, in brief, as follows:

A new street was recently opened up in Dallas when the Texas and Pacific Railroad tracks were removed from Pacific Avenue and the process of reclaiming the old two-story brick fronts, or rears, on that thoroughfare was begun, a process which will eventually make Pacific Avenue one of the four most important in the City. The Club, through the efforts of it's Executive Board and its President, M. O. Carder, closed negotiations with an owner of one of the two-story structures whereby, in exchange for the Club's spending $6,000.00 upon the remodelling of the front and second floor of said building, the owner would grant the Club a six year lease upon the second floor for its quarters—with an option for leasing the space at a fixed rental thereafter. As there is considerable agitation at this time among the citizens, architects, owners and builders of Dallas to stimulate the rapid and artistic beautification of this new street, the Club has been given publicity on its building as the "Model Front" and plans are being made to attract city wide attention to the building during its erection and upon its completion.

The design of the building was chosen by means of a competition among three designers in the city, the selected scheme being a composite of those submitted by Dudley S. Green and Ralph Bryan.

The plans for financing were drawn up by a building committee composed of C. D. Hill, Chairman, F. O. Witchell, H. A. Overbeck, H. M. Greene and D. F. Coburn, Architects, Jas. F. Chambers and Louis W. Hickey, Contractors, and Walter Williamson and B. S. Wakefield, Subcontractors. This Committee called a meeting of the entire building fraternity of Dallas in March and at this meeting by voluntary subscription raised over $6,000.00, all of which was a tribute to the spirit of the builders of Dallas. The working plans were completed and, as has happened before, the final figure went somewhat over the $6,000.00. Rather than sacrifice any of the features of the design by reductions and cuts, the Committee went to work again to raise additional funds, which process is now practically complete.

A total of $8,000.00 has already been subscribed and the Club now has a matter of $6,500.00 cash on deposit in a local bank. Material is already being fabricated for the beginning of the work and as soon as sufficient material is on the premises, wrecking of the present building will start.

The front is in limestone and terra cotta, Spanish Renaissance in design with a foyer for the first floor for a motion picture theatre, already on the premises. The Loggia in the second story leads into the Lounge, behind which are grouped an office, check room, toilets, storage closets and a kitchen. At the rear is an assembly hall seating about 160 and including a small stage. This hall is to be used for exhibitions and the Club's social activities and may be let out to private groups for dances, as a source of revenue to the Club.

The atelier is a half story above the second floor, directly above the service group in the center of the building, with window space on three sides above the roof line and accommodating eight tables.

In addition to cash contributions from the local building fraternity, most of the materials going into the building are being furnished at almost cost, not only because of the willingness of the donors to assist the Club but because the building will be the first thorough remodelling project on the new avenue and will to some extent set a precedent for future work—representing the best that may be had.

The actual erection work is in the hands of W. H. King, Dallas contractor and Club member, and is being done practically at cost. Construction will probably commence the middle of August and it is hoped that the first of October will see the Club at home in its new quarters, in time for the election of officers for the coming year. The present officers of the Club are:

M. O. Carder, President.
Walter Anderson, 1st Vice-President.
Hal Yoakum, 2nd Vice-President.
Chas. L. Kribs, Jr., Secretary.
Arch C. Baker, Treasurer.
M. C. Kleuser, Ex. Board
Edward E. O'Brien, Ex. Board.
Advisory Board.
D. F. Coburn
C. C. Bulger.
Herschel D. Smith

CLUB SYMPOSIUM

A FEATURE of the issue of PENCIL POINTS for October will be letters from various clubs describing their activities and telling how the club was organized and how it grew. The object is to present a mass of material helpful to men throughout the country, who are interested in the formation or conduct of architectural clubs. We want this material from everywhere, we want it to be representative of clubs of all ages and of all sizes. We want it to be representative of all sections of the country. This is a general invitation to architectural clubs to contribute a letter of from one hundred fifty to a thousand words on the subject of the club to this symposium, for the good of the club idea.

EDITOR.

CHICAGO ATELIER

NINE months ago a small group of architectural school graduates, under the leadership of Edmund S. Campbell, realized the need of a live Atelier in the City of Chicago and organized what is now known as the Chicago Atelier. Everyone following the architectural student competitions throughout the country must realize that the Chicago Atelier is succeeding in its purpose. Bieg, one of our charter members just won the Paris Prize while Cerny, our Massier, won the LeBrun Scholarship. That is certainly setting a pace for the rest of the Ateliers. Besides this, we have received eight publications of our work during the year.

The success of the Atelier was due almost entirely to Mr. Campbell, who with the help of a few older men brought the Chicago Atelier to the top. The Beaux Arts Society soon realized the ability of Mr. Campbell and he is now leaving us to become Director of Architecture of the Beaux Arts Society in New York. In leaving we wish him even greater success than he had with us.

In place of Mr. Campbell, we were extremely fortunate to be able to get Mr. Andrew Rebori to act as Patron. It is safe to say that there is no man in town with the personality of Mr. Rebori who has the interest of the young fellows at heart and the ability to put in words his knowledge. We are indeed happy to have Mr. Rebori as a Patron. Mr. MacCauley, a former logist of the Paris Prize and winner of all the minor Beaux Arts Prizes, will be our Sous Patron.

With leadership like that and George Conner just back from Paris to be our Massier, the outlook for the Chicago Atelier is extremely bright.

NEW YORK'S PROPOSED ARCHITECTURAL CLUB

AS a result of the notice in the July issue of PENCIL POINTS regarding the desirability of a club for Architectural men in New York a total of over four hundred names has been received to date. Such wonderful response certainly merits the broadcasting of tentative plans of such a club, as drawn up by the Executive Committee of the Architectural Bowling League of N. Y.

It might be well at this point, for the information of any readers of this magazine who are not familiar with the details, to recall our annual dinner at the Pershing Square Savarin, Tuesday, April 15th. The principal speakers of the evening, including some of the leading architects of New York City, made the first public announcements of the birth of the club idea. Architects as well as men were quick to recognize the great benefits to the entire profession to be derived from such a club as was proposed at that remarkable gathering. Various conferences which followed between members of the Bowling League and their employers developed a situation which lacked only the endorsement of the men of the profession to make the club an assurance. The notice in PENCIL POINTS was the result.

It must be understood that the following plan of organization has not been gone into in detail as yet and is merely a nucleus from which to work, at the same time expressing our ideals.

PURPOSE

Good Fellowship, Recreation, Education, Dormitories and Employment.

ORGANIZATION

Three classes of membership:—

A. Active members.

American citizens directly employed by Architects or Firms of Architects. From this body of men the following officers and directors will be nominated each year:—President, vice-president, 2nd vice-president, secretary, treasurer, assistant treasurer and financial secretary. A board of directors to comprise one representative from every office employing active members of the club, said representative to be appointed by the active members in his respective office and to have full power to vote for them at all regular meetings called by the president of the club, including elections of officers.

B. Honorary members.

Architects, Sculptors, Artists, Professors and other leading men as may later be suggested. These men though having no power of vote will be invited to sit at all regular meetings and at least one honorary member will be appointed in an advisory capacity to every committee.

C. Associate members.

All architectural men not included in the two foregoing classes. Members of firms and employees of allied industries. These men can only be appointed to committees or given the power of vote by the unanimous approval of the executive committee.

STANDING OF THE CAMPAIGN TO DATE

On the receipt of two thousand bona fide names of eligible active members signifying their endorsement of this movement, and pledging their active moral support, committees will be appointed to investigate practical building sites with a view to securing an option on the best and announcing in due time a competition for plans of a suitable club house. Consideration will also be given to the possibilities of re-conditioning some existing building.

DUES

It is impossible at this time to even hazard a guess as to what the dues, etc., will be, but as this club is designed primarily as a benefit for the employees, it is obvious that all charges must be based on the average man's salary in our profession.

Will at least one man in every office take the initiative and get the signatures of every eligible man in his office, who is really interested in this club idea, and mail them to Mr. E. L. Capel, Pres., or Mr. N. T. Valentine, Sec., Architectural Bowling League of N. Y., Hotel Shelton, New York City. It is the only way we will have of knowing whether or not the men of this City want a club. If they do, they are going to get it. If not we may as well drop the idea right now and go ahead with our present activities and their accompanying round of dinners, dances and other good times.

Mr. M. L. J. Scheffer, Chairman of the Baseball Committee wishes to announce that he is picking out an all-star-team to represent the profession in New York City and is open for challenges from amateur teams in this and other cities. Mr. Scheffer can be found at the office of Mr. James Gamble Rogers, No. 367 Lexington Ave., N. Y. C., and he will be pleased to hear of any prospective matches. Teams from the various offices in the League are now playing off their games according to the schedule prepared by Mr. McGuiness, of W. L. Stoddart's office, and their standings will be announced in the October issue of PENCIL POINTS.

The official year-book of the League for the season 1924-5 is now being made up and all allied industries desiring advertising space in this issue should immediately communicate with Mr. G. R. Paradies, Chairman Advertising Committee, McKenzie, Voorhees & Gmelin, No. 342 Madison Ave., N. Y.

N. T. VALENTINE.

THE SKETCH COMPETITION

NOW is the time to enter some of your summer sketches in the PENCIL POINTS SKETCH COMPETITION FOR 1924. Everyone everywhere is eligible excepting practicing architects maintaining their own offices, or members of firms, and professional renderers, i. e., men who derive their principal income from making renderings on other than a salary basis. Sketches may be in any medium or combination of mediums as pencil, pen-and-ink, water color, etc. Entry into this competition is entirely free. The conditions have been published in full in PENCIL POINTS and a copy of the conditions will be mailed free upon request addressed to the publishers of this journal.

The success of the competitions we have held in the past has been due in a great measure to the interest aroused by architects and educators who have directed the attention of members of their organizations or classes to the competition, we hope for a full measure of this kind of co-operation in the case of the present competition.

Edmund S. Campbell.

EDMUND S. CAMPBELL, DEAN OF THE BEAUX-ARTS INSTITUTE OF DESIGN.

EDMUND S. CAMPBELL, recently appointed Dean of the Beaux-Arts Institute of Design, has taken up his duties at the headquarters of the Institute in New York.

Mr. Campbell's record of accomplishment as an educator in the field of architecture is a notable one.

For the past ten years he has been a member of the Faculty of the Department of Architecture of Armour Institute of Technology, Chicago, Professor of Architectural Design in charge of design and since 1919 in charge of the Department. Otto F. Cerny, winner of the Le Brun scholarship of 1924; R. Nedved, winner of the Chicago Architectural Club Scholarship, 1923; and H. R. Bieg, winner of the Paris Prize for 1924 of the Society of Beaux-Arts Architects are all recent students of Mr. Campbell's in the Armour Institute of Technology and of the Chicago Atelier, of which Mr. Campbell was Patron.

Mr. Campbell has been an exhibitor at leading water color exhibitions and is a member of the New York Water Color Club, the Chicago Society of Arts, the Pittsburgh Association of Artists and other art societies and clubs. At present he is exhibiting water colors at the Delgado Art Museum, New Orleans, La.

Before going to the Armour Institute of Technology as a member of the Faculty, Mr. Campbell was for seven years a member of the Faculty of the Department of Architecture of Carnegie Institute of Technology (1907-1914). During part of that time, (1910, 1911, 1912), Mr. Campbell was on leave of absence traveling abroad and a student admitted to the Ecole des Beaux Arts, in the Atelier Bernier.

He was born in Monmouth County, New Jersey. He graduated from the Freehold High School and Stevens Preparatory School and in 1906 and 1907, respectively, he received the degrees of S. B. in Architecture and S. M. in Architecture at the Massachusetts Institute of Technology.

The appointment of Mr. Campbell as Dean marks an important advance in the development of the B. A. I. D. for it will make possible more effective co-operation with educational institutions throughout the country.

ARCHITECTURE AND THE MACHINE

THE current issue of *The American Mercury* contains an interesting article by Lewis Mumford under the title "Architecture and the Machine" from which we quote the following extracts:

Foreign critics have sometimes hailed the triumph of engineering over architecture in America as an aesthetic achievement; but when one examines the matter a little one discovers that a good part of the aesthetic achievement is the result of excellent photographs, snapped in unusual positions, and so the triumphs turn out to be not quite so brave and formidable as enthusiasts make them out. If the modern factory is good to look at, so was the old New England mill; if the modern steamship gives æsthetic pleasure, so did the clipper. In point of fact, the effects of the machine upon the great run of our buildings have not been favorable to beauty or amenity; and if the engineer is steadily eliminating the architect from every province except the country-house, his success is mainly the blind result of economic forces over which neither engineer nor architect has any control. Building is the last province to be conquered by the machine; just as the architect himself is almost the last artist who retains a vestige of independence. To see what this transformation means we must recall what a building was internally before the coming of the engineer.

Up to the Nineteenth Century a house was a shelter and, frequently, a work of art. Once it was erected, however, it had few internal functions to perform: its physiological system, if I may use a crude and inaccurate metaphor, was of the lowest order. An open fire with a chimney, windows that opened and closed—these were its most lively pretensions. Palladio, in his famous little book on the Five Orders, has suggestions for cooling the hot Italian villa by a system of flues conducted into an underground chamber from which cold air would circulate, but this ingenious scheme was on the plane of Leonardo's flying machine—an imaginative anticipation rather than a project.

With the exception, indeed, of Wren's suggestions for ventilating the old Houses of Parliament, and Sir Humphry Davy's actual installation of apparatus for this purpose, it was not until the Nineteenth Century that engineers turned their minds to this problem. Yankee ingenuity devised central heating before the Civil War, and one of the first numbers of *Harper's Weekly* contained an article deploring the excessive warmth of American interiors. At one time or another during the century running water, open plumbing, gas, electric lighting, drinking fountains, and high speed electric elevators made their way into the design of modern buildings. In Europe these changes came reluctantly, because of the existence of vast numbers of houses that had been built without a mechanical equipment; so that many a student at the Beaux Arts returned from an attic in the Latin quarter where water was carried in pails up to the seventh story to design houses in which the location of labor-saving devices became an essential element in the plan. It is only during the last two decades that the full effect of these renovations has been felt, even in America.

A further effect of the machine process on the internal economy of the modern building is that it lends itself to rapid production and quick turnover. This has been very well put by Mr. Bassett Jones, in an article in the *American Architect*, which is either a hymn of praise to the machine or a cool parade of its defects, according to the position one may take. Says Mr. Jones:

"The writer well remembers the late Douglas Robinson, when outlining the location and property to be improved by the construction of a building some twenty years ago, ending his directions with the proviso that it must be 'the cheapest thing that will hold together for fifteen years!' When the amortization charges must be based on so short a period as this, and with land taxes constantly increasing, it becomes obvious that construction must be based upon a cubic foot valuation that prohibits the use of any but the cheapest materials and methods."

With the features that govern the construction of the modern building thus conditioned by external canons of mechanism, it follows that purpose and adaptation to need play a smaller and smaller part in the design, and that the æsthetic element itself enters only by accident.

In this bare mechanical shell there is precious little place for architectural detail. Our first skyscrapers were designed by men who thought for the most part in terms of established architectural forms: Burnham and Root's Monadnock Building in Chicago, which has exerted such a powerful fascination over the new school of German architects, was an almost isolated exception. The academic architects compared the skyscraper to a column, with a base, a shaft, and a capital; and they sought to relieve its empty face with an elaborate modeling of surface, like that of the old Flatiron Building. Then the skyscraper was treated as a tower, and its vertical lines were accented by piers which simulated the acrobatic leap of stone construction: the Woolworth Tower and the Bush Tower were both designed in this fashion, and, in spite of numerous defects in detail, they remain perhaps the most satisfactory examples of the skyscraper that we have.

But neither column nor buttress have anything to do with the internal construction of the skyscraper, and so, following the veracious lead of the late Louis Sullivan, the buildings of the machine period have accepted the logic of the draped cube, and the only features of traditional architecture that remain are the ornaments that cling to the very highest and the very lowest stories.

AN ARCHITECTURAL CENTER FOR THE METROPOLITAN DISTRICT

IN THE Mecca of American Architecture, in the city whose training is an almost requisite post-graduate course in the architcetural profession, there remains yet to be organized an association designed to bring into closer contact the various professions interested in architectural matters, and to facilitate the progress of new talent which is continually entering this field.

During the next few weeks there will be launched an organization to meet these demands, from whose tentative Constitution are quoted the following articles, covering

GENERAL OBJECTS and MEMBERSHIP:

Article II

"To the promotion of closer friendship and cooperation among those engaged in, or associated with, the architectural profession, thru stimulation of individual and group activities—athletic, educational, professional, and social—this organization is primarily dedicated."

Article III

"Membership in . . . . . . shall be individual and the only eligibility requirements shall be an interest in the purposes of the organization, as outlined in its Constitution and Specifications, and a courteous regard for the rights of others and for the law of the land, essential to the achievement of these objects."

Article II means that the organization will be architectural in the broadest sense of the word, inviting to participation in its activities and control, members of every calling in any way connected with architectural work.

Control of this organization will be thoroughly democratic—every matter of major importance will be decided by ballot of the entire membership. Constitutional provisions will eliminate the possibility of clique control in any administration, also of monopolizing of offices year after year by a small group of men. There will be opportunity for a large part of the membership to gain valuable experience thru official participation in organization affairs.

A number of influential individuals and organizations have expressed interest in this project, but the organization is not and will not become tied up to any single interest or group of special interests.

Sufficient response has already been secured to insure organization of this association, but there is still opportunity for additions to the charter membership. Tentative drafts of the Constitution and Specifications (By-laws) will be ready shortly, and these will be sent without obligation of any kind, to all who so desire.

This notice is an invitation to communicate with the undersigned, offering any suggestions, or criticisms, and asking any questions you may wish, concerning this project.

A. F. Darrin.
949 Park Place, Brooklyn, N. Y.

Francis Keally

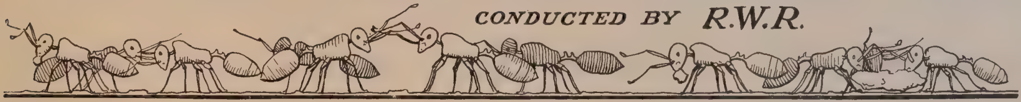
FRANCIS KEALLY.

FRANCIS KEALLY, one of whose drawings is shown on a plate page in this issue returned a few months ago from a two year study trip abroad. In collaboration with James Renwick Thompson he recently won the first prize of $1,500 in "A Three House Competition" conducted by the Lighting Educational Committee, New York, of which Wm. P. Bannister, F. A. I. A., was the Professional Adviser. The purpose of the competition was to obtain designs for three types of dwellings: (a) A house costing fifteen thousand dollars. (b) A house costing ten thousand dollars. (c) A bungalow costing five thousand dollars. The program required that the plans for each house should clearly show a suitable layout of electrical outlets which, supplied with proper lighting fixtures will result in good illumination and also electrical outlets for other than lighting purposes, which will enable the use of various labor-saving devices advocated by authorities on the subject of Domestic Science. The jury of award was as follows: Frederick L. Ackerman, architect; Marcia Mead, architect; Bassett Jones, consulting electrical engineer.

Mr. Keally works in a broad bold manner, frequently using charcoal and pastel as his mediums in sketching and rendering.

Here *and* There *and* This *and* That

CONDUCTED BY R.W.R.



WE have with us today Ruth W. Rogers of Shreveport, La., who submitted the heading reproduced above in our justly famous Competition. Why the bugs? we hear everybody asking. That is just what we asked. But so far Miss Rogers has kept a discreet silence and has not tipped us off as to whether she thinks bugs should be the trademark of this column or whether she is comparing us with the busy and industrious ant, or what. Anybody's guess is as good as ours.

RUTH ROGERS in Shreveport and Ruth Gerth in Minneapolis! Why don't some of the Marys and Ethels, etc., send in things for this column? Must the Ruths do it all?

AND Mrs. Gerth is awarded the prize for the most interesting and valuable contribution for this department for August. Looks as though the petticoats were going to give the pants some competition!

WELL, the poets have sure come to life. Here they are—three—count 'em—three.

W. W. Beach contributes this:

An architect who'd worked a lot
Says "I need recreation,
This city's getting too damned hot;
I'll off on my vacation."

He found a farm of restful air
To pass his fortnight lazy.
The farmer's boy was also there
With headwork somewhat hazy.

They'd sent him home, his pa explained,
From school of architecture.
No meed of drawing had he gained
Nor comprehended lecture.

"Why," said the city man, "I'd think,
With this boy's thirst for knowledge,
And these broad acres, he'd best drink
At agricultural college."

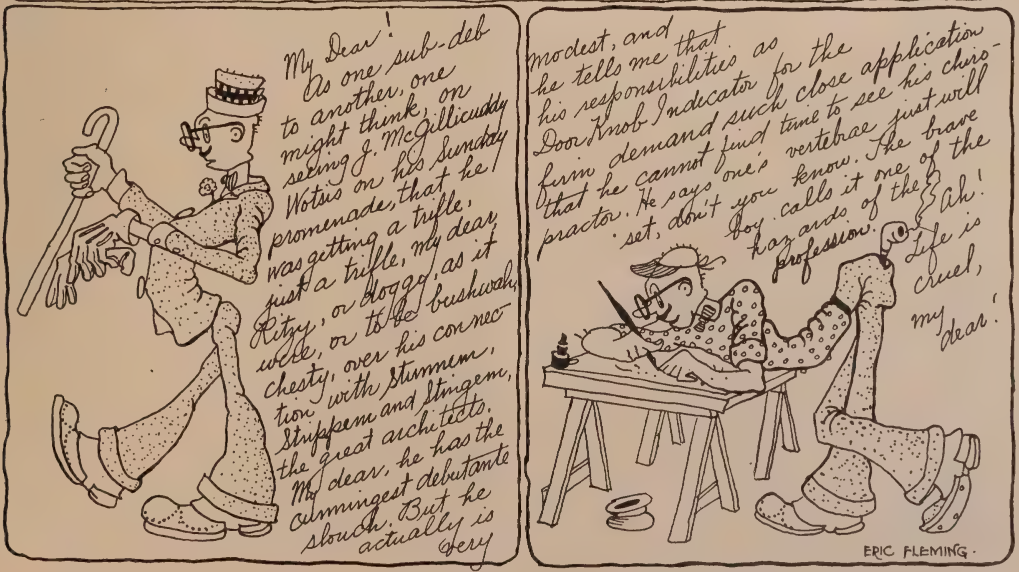
Quoth pa, "That's where he'd ought to be.
I'm gosh durn sure you're right;
And we'd have sent him there, y'see,
Only he ain't so very bright."

And our old friend Oong Gow is responsible for this one.

WHOM WOULD BE LEFT?

If we should find a fitting doom
For persons who still say "colume;"
Should we behind thick stone immure
Those folks who call a drain "the sewer;"
Were we allowed to slay with hate a'
'n Engineer with all his "data;"
Should we send from our shores away
All members of the A. I. A.—
Who think that any concrete vase
May dignify a marble base;
Were some fate, harsh but just, designed
For plagiarists of lazy mind;
If we could give the farewell mit
To all the following, to wit;
The chaps who draw, (they are not rare)—
Potato clouds up in the air;
The numerous tribe who—uncouth hicks—
Good Roman and wild western mix;
The hundreds of uncultured souls
Who shoot a style all full of holes—
Could we all these together get
And drop them through the oubliette,—
Pray, who'd be left to act as chiefs?
Who'd make our laws and building briefs?
Who'd estimate,—our Tech. schools teach?
What celebrated FRIBA'd preach?

EXTRACT · FROM · FIFI'S · LETTERS · TO · MIMI



Eric Fleming, New Brunswick, N. J., is responsible for this.

Who'd specify,—who'd superintend?
Who'd typewrite or torn tracings mend?
What member of the Institute
Would not go down to just repute?
And would the man who owns the mint
An architectural journal print:
Where could he find these bookish guys
To write the breathing exercise?
And last but direst woe of all—
Whom do you think would read this call?

And Pencil Pointer K. A. Snow of Pittsburgh submits this one.

"THE GLORY THAT IS GREASE"

As architect the ancient Greek
Had very nearly reached the peak.
His temples were so much refined
That cornices not quite aligned
And columns subtly out of plumb
To-day leave tourists standing dumb
With admiration for the guy
Who piled unmortared rocks so high.
But tho his work in arts of form
Could make his artist heart grow warm
The selfsame Greek too often felt
Quite empty just inside the belt
Because at that time as to-day
An architect with but his pay
Could hardly tighten out the slack
Between his front side and his back.
In fact the people grew so weak
Their land remained no longer Greek
And over half of them left home
To look for better jobs in Rome.
While there one guy doped out the scheme
Of selling candy and ice cream.
The others quickly caught his speed
And thought to obviate their need
By vending other kinds of feed.
Soon all those Greeks so thin and gaunt
Each opened up a restaurant
They then grew fat and free from want
And now, as our poor stomachs know,
Most every doggone place you go
You find Greek lunch rooms row on row.

HOORAY for the summer poets! How they do their stuff this hot weather is more than we can understand. It is all we can do to paste it on a sheet and get it ready for the printer.

WHO says advertising in this column doesn't get results? Didn't somebody a couple of months ago ask for a formula for a "fixatif?" Of course somebody did. And Mr. U. McCleary of Los Angeles furnishes the answer. He says mix equal amounts of the best grade of white shellac and pure denatured alcohol. When dissolved spray on drawing with a fixatif sprayer or atomizer.

Anybody else want to know anything? If so send in your questions to this infallible fount of wisdom.

THIS month we are presenting a photograph of Mr. Albert Kahn's organization. Quite a snappy looking crowd, say we, and they are not all in the picture either. M. P. Wright, Mr. Kahn's secretary, in submitting the photographs says at least fifty more were away on vacations, busy on various jobs, etc.

We shall be glad to publish similar pictures of other drafting-room organizations if good photographs are submitted.

ELLIOTT HATCH, of Amarillo, Texas, thinks he and his brothers should be placed second in our great international and world-wide competition for the largest (most numerous) architectural family. Any other aspirants?

"We note from your August issue the Orlopp Bros, have gained first place in the nomination for a champion architectural family.

"There are four boys in our family, three are architectural draftsmen, and we wish to try for second place in the run off for a family of architectural draftsmen. Eugene, Elliott and Marion, Jr., of Ft. Worth, and Amarillo, Texas.

Very truly yours,
ELLIOTT HATCH."

MISS CONSTANCE GROSVENOR ALEXANDER, Dana Hall, Wellesley, Mass., would like a copy of Pencil Points for February, 1922.

L. P. Fey, Seattle Architectural Club, 956 20th Avenue, Seattle, Wash., wants to secure the March, October and December, 1921, issues of Pencil Points. He has an extra copy of June, 1922, which he would like to dispose of.

E. L. Williams, 3440 Cass Avenue, Detroit, Mich., wants copies of Pencil Points for September, October and November, 1920, and May, 1922.

Agosto 6, 1924.

To R.W.R.
The "Papa Montero" of Here & There & This & That.
Dear "Papa Montero":

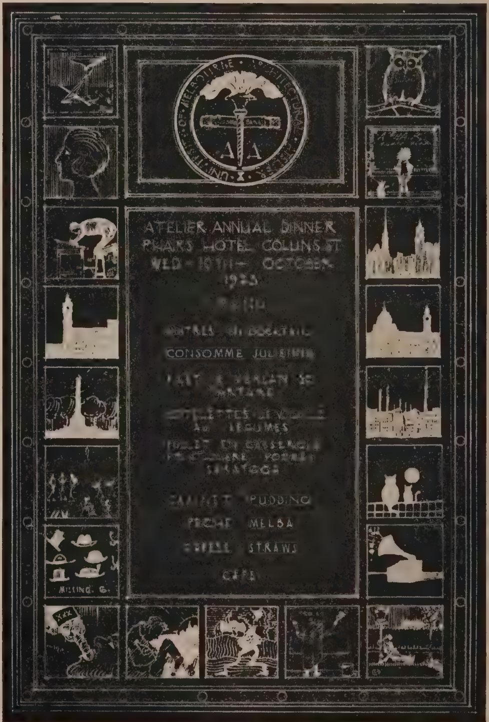
In your July issue you say you want more international stuff and, by the sake of Vulcano, you are going to get it. Yes sir . . . . . you are going to get it, as far as I go up there and have a "bronca" (rough fight) with you. Yes, with you . . . . with you. You have no "endiablado" right to answer questions and write about *fire places* in this month and make your tropical readers sick. You have insulted us! You have made me read at 32°C and all "embarrado" with Prickly heat baby powder about *fire places.* Uff, too hot!

Fire Places . . . . Ice Boxes, yes ICE BOXES! is the business to talk about. Y. . . . . . or at least of electric fans, siphon vents, or refrigerating machinery.

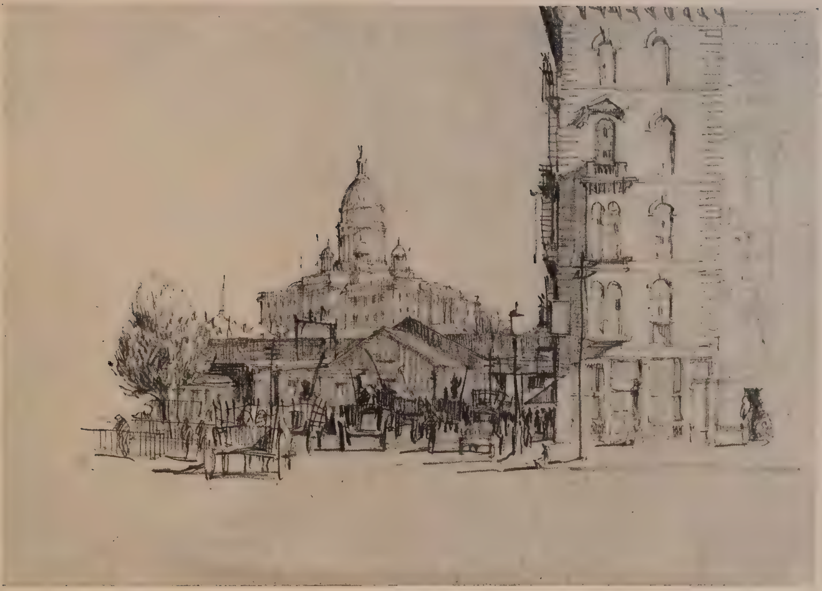
Well, now you know, stop that *fire place* stuff in summer or no P. Points will be read in Cuba and adjacent islands.

Que Dios lo conserve y pueda venir a meterse un "highball" en la Habana en winter le desea.

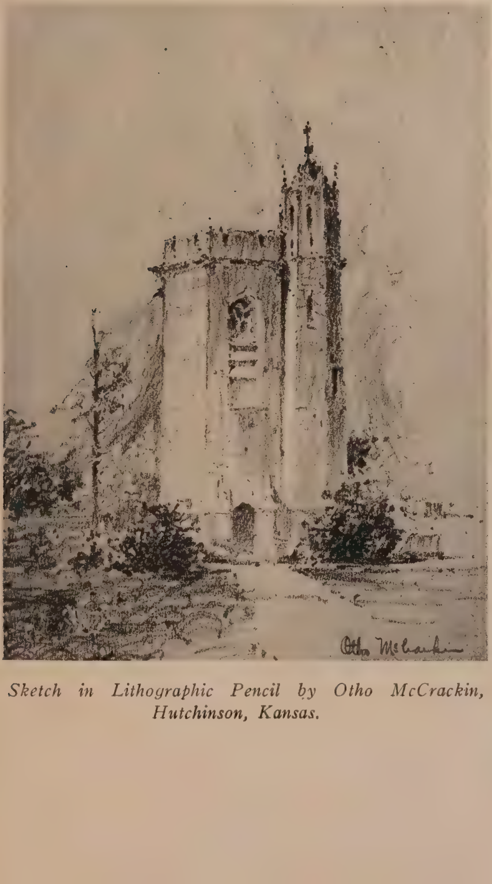
F. Ga. Gamba, Havana, Cuba.



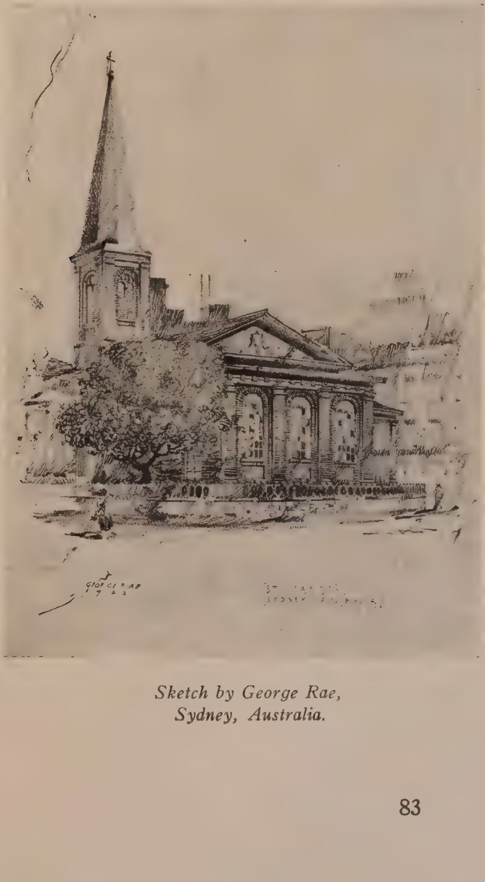
From the Annual Atelier Dinner of the University of Melbourne, Australia.



State Capitol, Providence, R. I., by Maxwell Fry, Liverpool, England.



Sketch in Lithographic Pencil by Otho McCrackin, Hutchinson, Kansas.



Sketch by George Rae, Sydney, Australia.

A Part of the Organization of Albert Kahn, Architect, Detroit, Michigan. 1. Albert Kahn, 2. Louis Kahn, 3. Moritz Kahn.

THE SPECIFICATION DESK

A Department for Specification Writers

VERY SPECIAL NOTICE TO SPECIFICATION WRITERS!

We want more good, live material for publication in this department. Brothers Beach and Brostrom with their breezy and humorous contributions printed herewith have proved that something amusing can be said even about specifications. Has anyone else anything along the same lines? Or different lines?—Serious or not so serious—they are all welcome.—This is the place for us all to discuss specification problems.—This department is going to be better than it has been—and we want to hear from every specification writer who has a question to ask or some idea or method to contribute.—EDITOR.

HUMOR IN SPECIFICATIONS.

By Ernest O. Brostrom

(Read this and weep)

SPECIFICATIONS cannot usually be classed as fascinating literature, nor are they intended to fill a niche in the archives of humor. Still, every once in a while, there are passages in specifications that incite laughter. Sometimes it is a mere typographical error, or the omission of a word, or lack of, or improper punctuation. Or it may be a jumbling of phrases caused by inadequate notes or lack of knowledge on the part of the transcriber, and perhaps, oftentimes, of the transmitter.

The mere fact that the arrangement and wording of a specification clause may be droll, is not serious, unless it so confounds its intent and purpose as to leave that portion of the document without meaning. Then the final result may be exceeding grave.

The writer has come upon a strange example of specification writing. If it was not for the evident seriousness with which it was prepared, and the probable dire results that must come from the document's very incompetence, it would be a most humorous contrivance of headings, paragraphs, words and word omissions, capitalization, punctuation and lack thereof. As it is, it is a curio. Extracts therefrom are submitted in the following, under the title

SPECIFICACIONS

or

(Melodrama entering in by the rear gate)

"The Arch-i-tect and His Stenog."

These extracts are copies exactly as found, errors, and all. No attempt has been made to make them more ludicrous than the original. Omissions are not indicated except where they occur in the sentence, and these breaks are indicated by the use of the dash—. All matter omitted is written in customary specification form and, adding nothing to the interest hereof, has therefore been left out.

The "General Conditions" comprised sixteen pages of well written material (probably copied from the standard A. I. A. conditions) with one exceptional outstanding paragraph quoted below.

The "General Specifications" comprised six typewritten pages. From these pages the extracts have been taken.

SPECIFICACIONS

for

....

GENERAL CONDITIONS:

The architects decisions, in matters relating to artistic effect, shall be final, if within the terms of the Contract Documents.

SCOPE:

Contractor to visit folding and check on the alternations, etc.

CONCRETE:

The floor construction— —will be concrete joint & till construction.

Floor till will be 121212 with 2″ concrete on top and a 4″ joint.

BIRCHWORK:

The walls will be faced with brick to match that now in the bldg. with holler block. All brick walks laid straight and well Bonded— —constituted—by breaking joints at least 3″ in every course.

the first floor except around light court & Elevator to 4″ thick around light court & Elevator— —and shall be inedged at ceiling and flushed with mortar.

undone openings shall be made by filling tile with concrete and putting 2½″ rods at

SUSPENDEDCEILING

The entire 3rd floor to be a suspended ceiling of ¾ inch —carried on partition tile where possible others wish suspended from ceiling slab with expansion butts.

PLASTERING:— — —

All walls, ceiling partitions, soffits, etc. throughout— —and Sample in basement to be plaster 3 coats in best manner —applied in the customary weimer.

Bath will have the rooms mortered off to represent 3 x 6 tile from a hieght of 5—O″ Bath Rooms.

Floors will be raised 7 inches using—floor tile laid flat with 2 on top.

Sash and Frames on the Frunts will be wood of same size as those in present building and glazed with clean double straight glass.

Windows on sides will be an hollow metal window Hung.

Metal used throughout shall be No. 24 guage tight coated galvanized and will carry the board of Under writers label. Heads and joints to have a moulded Staff —Stiles shall each be formed to provide for propes operation—Each joint to have a weight picket of ample size to permit of easy application of sash weights. Weight jackets to have ample cover which will fit tight and not offer abduction to operation Sash to be for glass divided with Minstrin bars into tights as required by Underwriters. Muntives to have removable caps to prevent of glazing without renewing sash.

Bash to have bar lifts and iron hooks blocks finished —glazed clear with ¼″ wire glass thoroughly in putty. Metal shall have on coat of an appeared metallis paint before leaving factory.

Stairs shall be of either cast iron or pressed steel with treads filled with 11/2 tenago. Stringess shall be modeled. Treads supported at Ends securely bolted to stringers with Roner heads. Landings filled with Tenago.

Newd shall be either iron or No. 12 Blue armealed steel with caps or pendants with balistris of wriught iron.

STORE PAINTS:—

This contractor shall cut down glass of store paints where necassery, All to have same store front as now in place.

IRON WORK:

This contractor shall do all flashing and cements made by these changes. Where shown on the drawings put in gals, extending from 2nd floor up, in ducts, and roof to have a 12″ star rec-itilation.

the roof extending down to the ceiling put in iron skylights.

All to be glazed with best Enality ¼ inch rough glass —left ole and clean at competition of work.

Sidewalk LIGHTS:—

Provide lights of the "71% daylight Construction" Simplex Fresinal fixler Prusia Co. 4′ sq. lences of Lazalik glass set on 4-¾ inch ctrs.

(*Continued on page* 88)

THE PROBLEM SOLVED

SPECIFICATIONS:—That part of the service of an architect intended to prove to him that life is not all one long sweet song; to convince his client that his architect is both erudite author and likewise legal person of no mean ability;—and to inform the contractors as to just how ignorant or nutty an individual can be.

"Why hath a dog fleas?"

Why, indeed, except to keep him from becoming indolent?

If architects didn't have to write specifications, their "work" might be so delightful (when they had it) that "downy beds of ease" would be harsh and bumpy in comparison. Happily (or not) "those damn specifications" are the thorns on the rose stems, the flies in the ointment, the fleas on the dog. Thereby is the architect spared from degenerating into that despicable (and enviable) being, a happy, contented soul.

No chance for such evolution with *specifications* to harass him.

"Specifications" are a (more or less) legal document intended to stipulate the materials and manner of their fabrication and placement entering into the construction, equipment and embellishment of a given structure.

They must also be descriptive of said materials and workmanship, else how would the poor inspector or clerk-of-the-works know what ought to be, or how it ought to be or even if it ought to be?

And, if the author of the formidable document doesn't himself know how and what it ought to be, it shall at least be equal to "abracadabra" and then must the poor-wit yclept "Superintendent," search out an abracadabra, dissect it and study its catalog description and also compare the "Brocadabrit" which the contractor proposes to substitute either to oblige a sales friend or to save a secret ten (or fifty) bucks.

And, if the superintendent presume to reject Brocadabrit, shall not the owner be informed that the only reason the architect had for specifying the other (and worser) item was that he received a substantial quid pro quo for so doing—or "if he didn't he's a damn fool, because the makers are willing to pay for advertising in architects' specifications.

But the owner is trying his best to remain on good terms with his architect and kicks out the insinuating rascal. (*At least, they do in the movies.*)

But legal document our poor specifications must be, forsooth, for is it not stated in the General Contract that the contractor is a fraud, a villain and a horse thief and there is no good in him? And is not the architect a little tin god on wheels, the only one whom the owner can trust to watch the wretch?

Oh, if the architect might only remain on his pedestal! But it's so darn tipsy, being worn smooth on top and round on the bottom, that the poor ethical entity wobbles around on it like a roly-poly toy, only he hasn't always enough lead in his feet to land him right side up.

If only all "architects" were architects!

But they're not and the public can't always discriminate—seldom cares. In its mind, an architect is a composite —an average between the high-minded trained expert he ought to be (and often is) and the novice, the mediocre *and the crook.*

By their specifications shall they be judged. But not altogether, let us hope.

In any event must these specifications be good and binding, not so you can "drive a Ford" through them anywhere —or even "throw a dog" through them—but good and tight—so tight that the general offender and all his sub-offenders must go down on their ham-bones if they wish to vary e'en so much as one fine, red hair from the "interest of architect,"—must even "raise their hands to go out."

"First-class" is first-class, whether it be in Mr. Pork Packer's palace or in his packing house, and nothing short of same is to be tolerated, in bathtub or scraping tank—and the sleepless detective must be on the job days, nights and Sundays to see that nothing short of first-class is put over.

Else why pay a detective?

Why, indeed?

If the contractor is scrupulously honest, why either specifications or detective?

It is inscribed upon the records of a certain court that a contractor testified that an owner had so high an opinion of him that he said, "Oh, to H— with the contract, Jack. You build me a good house and I'll pay you for it."

How perfectly simple!

How simply perfect!

"To H— with both contract and specifications!"

Let's just make drawings and have honest contractors do the buildings.

And there's the solution of the whole problem.

Why not?

W. W. Beach.

LEAKY CHIMNEYS

By Otto Gaertner

THERE seems to be an increasing number of leaky chimneys in our finer residences during the last few years. It is difficult to account for this condition, as supposedly better materials are being manufactured now than in the past and the methods of using them are the same. It is true that labor has no longer so good a reputation; but then, this leaky chimney condition prevails under the best supervision. Exposure, no doubt, has much to do with it but the aim is to have the chimneys water-tight under the worst possible exposed conditions.

It has been found that some chimneys which were specified to have the bricks laid up in integrally waterproofed mortar absorbed enough water to soak the masonry of the lower part of the chimney and to ruin the decorations in the rooms below. Perhaps lack of supervision at the building was responsible for this as the joints of the brickwork were probably not entirely filled with waterproofed mortar and the water penetrated the joints as well as the bricks.

It has also been found that some leaky chimneys were flashed with metal, the metal only extending slightly into the masonry so that when the masonry over the flashing absorbed the water it penetrated enough to get behind the flashing and down to the rooms below. Often water will penetrate twelve inches of ordinary brickwork especially where the brickwork is exposed so that a free sweep of the wind during a storm will exert a heavy pressure against it.

Flashings are often specified to extend four inches into the masonry and to be turned up one inch but in many cases this is not enough and if the water gets behind the flashing it will get down into the masonry below. It is better to specify the flashing to extend through the chimney to the terra cotta flue lining before turning it up. Such flashing, however, should be continuous horizontally so that any water held on the flashing at one place cannot overflow to leak through a joint elsewhere. By far the best way is to extend the flashing through the chimney and through the joints of the flue linings in such a way as to make a continuous pan of concealed flashing.

This pan should preferably be of hot rolled copper, weighing sixteen ounces per square foot. Lead or zinc may also be used but the copper is more common. The roof rafters must be kept sufficiently clear of the masonry of the chimney. A small gutter, two or more inches deep and about six inches wide is then formed in the space between the roof rafters and the masonry. The flange of this gutter on the side away from the masonry is carried out on to the sheathing not less than four inches and cleated down with one inch cleats, of the same material as the gutter, every six or eight inches. The bottom and side of the gutter are run at the same pitch as the roof and the bottom of the gutter continues through the face brick work of the chimney. After passing through the face brick the copper is turned up behind over regular steps formed in the common brick to suit the pitch of the roof.

These steps are flashed across the top and sides to meet and lock with the gutter flashing, forming a continuous water-tight stepped pan completely covering the brick work of the chimney. But where flues penetrate this flashing it must be cut out to receive them, a collar being turned up two inches high and fitting snugly around each flue. Thimbles must then be formed for each flue and

(*Continued on Page* 88)

PUBLICATIONS OF INTEREST TO THE SPECIFICATION WRITER.

Any publication mentioned under this heading will be sent free, unless otherwise noted, upon rqeuest, to readers of PENCIL POINTS *by the firm issuing the publication. When writing for any of these items please mention* PENCIL POINTS.

Ankyra.—Booklet showing application of this type of anchor in building construction. Sectional drawings showing details of application. 32 pp. Ankyra Mfg. Co., 148 Berkeley St., Philadelphia, Pa.

Samples of Tracing Paper.—Four samples size 17 x 22 of prepared tracing papers suitable for all types of work. George Vincent, 649 West 43rd Street, New York.

Elevator Specifications.—Documents covering passenger elevators and freight elevators with drawings. Standard filing size. Warner Elevator Co., 2613 Spring Grove Ave., Cincinnati, Ohio.

Terrazzo.—Treatise by Pasquale Galassi covering subject of Terrazzo work, under twenty-nine different headings and forming a basis for a perfect specification. Galassi Company, 345 Lexington Ave., New York.

Zenitherm.—Illustrated booklet in sepia with detail drawings showing application of Zenitherm lumber to both exterior and interior work. 16 pp. 8½ x 11. Zenitherm Company, Inc., 390 Frelinghuysen Ave., Newark, N. J.

Timbrel Vault Construction.—Portfolio describing and illustrating Guastavino masonry construction suitable for churches and other buildings. Full page plates. Data on Akoustolith sound absorbing stone. Covers subject on modern acoustics. 10 x 13. R. Guastavino Co., 1133 Broadway, New York.

Marbleloid—the Universal Flooring.—Illustrated booklet covering subject of modern flooring in various types of buildings and for many uses. Industrial plants, restaurants, schools, hospitals, sales rooms, churches, theatres are covered. 24 pp. 8½ x 11. The Marbleloid Co., 461 8th Avenue, New York City.

Interior Doors and Trim (3rd Edition).—Illustrated booklet covering these features in the modern residence. Mouldings, sections and much useful data. 24 pp. 5½ x 7. Curtis Companies Service Bureau, Clinton, Iowa.

Armstrong's Linoleum Floors.—Detailed specifications and complete description, 4th Edition. Loose-leaf portfolio with color plates, detail drawings and complete data for the specification writer. Standard filing size, 8½ x 11. Armstrong Cork Co., Lancaster, Pa.

American Mailing System.—Folder covering type 'L' mail chutes. Detail drawings and specifications. Standard filing size. American Mailing Device Corpn., 203 East 12th St., New York City.

Care and Cleaning of Building Marble.—Booklet containing information on best practice for keeping both exterior and interior marble in condition. 16 pp. Vermont Marble Co., Proctor, Vt.

Vulcatex.—Folder with detail drawings covering the pointing of brick, stone and terra cotta joints, caulking between steel and wooden window frames, filling expansion joints in concrete, pointing up and embedding glass on skylights, bedding slate and Spanish tile roofs, and pointing up flashings. Standard filing size. A. C. Horn Co., Long Island City, N. Y.

The New Art of Fine Bathrooms.—Brochure illustrated with 12 color plates showing the most luxurious and artistic types of modern bathrooms with their suitable appurtenances. 8 x 9. 16 pp. Crane Company, 836 So. Michigan Ave., Chicago, Ill.

Sunday School Furniture, Catalog No. 10.—Illustrates and describes all types of seating and other specialties required to equip a Sunday School room. 24 pp. 8½ x 11. American Seating Co., 14 E. Jackson Blvd., Chicago, Ill.

Ruud Gas Water Heaters.—A. I. A. filing index 29-D-2 Specification portfolio containing complete information on the subject. Detail drawings and typical layouts. Tables of capacities, roughing-in dimensions and everything you need to know. Ruud Mfg. Co., Pittsburgh, Pa.

The Right Angle.—Monthly magazine, July issue is a school house number and covers especially the application of various fireproofing specialties for the modern school house. Details of construction and much other useful data. General Fire Proofing Co., Youngstown, Ohio.

Ericssons Venetian Blind.—Full line of Venetian blinds for many uses. 24 pp. Swedish Venetian Blind Co., 1265 Broadway, New York City.

Armored Sidewalk Lights.—Folder with sectional drawings showing modern vault light construction. Standard filing size. American 3 Way-Luxfer Prism Co. 1309 S. 55th Avenue, Cicero, Ill.

Pilot Flush Valves.—Catalog describing complete line of mixing and flush valves. Roughing-in dimensions and complete data for the specification writer. 36 pp. 6 x 9. Hedges & Brother, Hedges Bldg., Newark, N. J.

A Manual of Remote Control Equipment.—Complete treatise on this subject with many diagrams, tables and much indispensable data for the architect, engineer, specification writer and draftsman. Handy pocket size. 64 pp. Hart Mfg. Co., Hartford, Conn.

Roofing Specifications.—Five documents covering built-up roofs over various materials. Detail drawings showing precise application. The Ruberoid Co., 95 Madison Ave., New York City.

Latest Creations in Stage Lighting Apparatus.—Booklet describing new types of equipment. Universal Stage Lighting, Inc., 321 West 50th St., New York City.

Equipping Your Home Electrically.—Booklet of suggestions covering the most economical methods of makeing electricity do your work. Layouts, specifications, instructions for wiring furniture, etc. The Lighting Educational Committee, 680 5th Ave., New York City.

Manual of Revolving Door Construction.—A. I. A. file No. 17-A-1. Covers design of revolving doors, illustrations of many different types, standard specifications and complete instructions for installing. 24 pp. 8½ x 11. Van Kannel Revolving Door Company, 250 West 54th St. New York City.

Nailcrete.—Data sheet covering qualities and application of Nailcrete in modern building construction. Six detail drawings and specifications. The Nailcrete Corporation, 105 West 40th St., New York City.

Norton Floors.—Illustrated bulletin with blue prints on subject of slip proof flooring. 8½ x 11. Norton Co., Worcester, Mass.

White Enameled Steel Medicine Cabinets.—Complete Catalog describing full line. Also including kitchen cabinets, sanitary receptacles and radiator enclosure cabinets. Instructions for installations. 24 pp. 8½ x 11. Columbia Metal Box Co., 226 East 144th St., New York City.

Soil Pipe & Fittings.—Catalog G covers the subject completely, including prices. Fully indexed. 152 pp. Cloth binding, convenient pocket size. Central Foundry Co., 41 East 42nd St., New York City.

Published by the same firm, Catalog "D." F. & W. fittings, layouts and complete information for specifying. 80 pp.

The Pocket Note-book A. P.—Instructions on establishing lines and levels on construction work. Vest pocket size. Warren-Knight Co., 136 N. 12th St., Philadelphia, Pa.

Toilet Partitions.—Specifications, blue prints and complete data for detailing. Standard filing size. The Mills Co., 5320 St. Clair Ave., Cleveland, Ohio.

Structural Slate.—A series of bulletins prepared by the Structural Service Bureau dealing with the various uses of structural slate. Also a specification, with appended suggestions for preparatory work by other contractors, necessary to receive the slate. The Structural Slate Company, 130 Robinson Avenue, Pen Argyl, Pennsylvania.

Sectionfold and Rolling Partitions.—New illustrated booklet, also covering subject of Hygienic School Wardrobes. Layouts, sections, details of construction, etc. 40 pp. 8½ x 11. J. G. Wilson Corp., 11 East 36th Street, New York City.

Casement and Transom Hardware.—Leaflet describing "Whitco" Specialties as applied to casement sash, either wood, hollow metal or kalamein. H. E. Holbrook Co., Mass. Trust Bldg., Boston, Mass.

Exterior Lighting Fixtures.—Catalog 4H. Profusely illustrated showing full range of exterior lighting fixtures for all requirements. Hundreds of designs. 96 pp. 8½ x 11. Smyser-Royer Co., Philadelphia, Pa.

Specification Data Sheet.—Contains information regarding Ventilouvre a specially designed ventilator for use in doors and transom space. Full page drawing showing details. 8½ x 11. Ventilouvre Co., 103 Park Ave., New York.

Special Grilles.—Catalog No. 66A showing special designs suitable for interpretation in bronze, brass, iron and steel. Many illustrations and much useful data. 40 pp. 6½ x 9½. Tuttle & Bailey Mfg. Co., 2 West 45th St., New York.

Brixment for Perfect Mortar.—Booklet with frontispiece illustrating residence designed by Mr. Charles A. Platt. Complete information regarding Brixment mortar. 8½ x 11. 16 pp. Louisville Cement Co., Louisville, Ky.

The Roof Beautiful.—Brochure illustrated in color on the subject of roof treatment. 8 x 11. 32 pp. Ludowici-Celadon Co., Monroe Bldg., Chicago, Ill.

Soss Invisible Hinges.—Booklet showing details and specification data. Hinges for furniture, cabinets and general use in buildings. 24 pp. Soss Mfg. Co., Grand Ave. & Bergen St., Brooklyn, N. Y.

Weisteel Compartments.—Catalog No. 11 describing compartments of all types. Blue prints showing construction and method of erection. Specification, including hardware. A useful book to all in any way interested in industrial buildings, public buildings, schools, hospitals, etc. 32 pp. 8½ x 11 in. Henry Weis Mfg. Co., Atchinson, Kan.

Mapaz Hand Book No. 1.—Neat little pocket size memorandum and note book, leather bound, containing data on painting and paint materials, and much other material interesting to architects and draftsmen, including a chapter on lace stencils, color formulas, etc. New Jersey Zinc Co., 160 Front Street, New York City.

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LEAKY CHIMNEYS

(*Continued from Page* 86)

dropped down over them and over the collars after which they are soldered to the collars in a water-tight manner. The tops of the thimbles must be made so as to turn down inside the flue linings at least one inch at the first joint. The linings must be set so that the first joint of each is at least six inches above the plane where the flue lining penetrates the flashing. Then, assuming that the roof covering is slate, the course of slate occurring against the chimney is flashed in the usual manner, course by course. The inner edge of this flashing however, is turned down to drip into the little gutter instead of being run up against the masonry.

If the chimney occurs below the ridge of the roof a cricket should be formed behind it and the flashing gutter should be run along the edge of the cricket against the chimney. The common flashing extending under the slate should extend six or eight inches under the slate. At the bottom of the flashing gutter, the water from the gutter is brought up underneath the course of slate occurring against the base of the chimney and on top of the slates below it to discharge on the roof. It is important that all joints in the metal shall be locked and soldered so that they will be water-tight and so that they will not open. The metal should not be punctured by nails from the slating or otherwise, and for this reason all fastening should be done by means of clips through which the nailing is done.

Some prefer to make the flashing gutter deeper than suggested above so that it will extend into the attic below sufficiently to be connected with drain pipes to the house leaders or to the plumbing system. While this is a good thing to do to prevent the liklihood of the water in the gutter from freezing under the bottom of slates, it must be remembered that precautions should be taken to cover the bottom of the gutter so that it will not be exposed to the warm air in the attic when it is cold outdoors as in that case condensation might occur on the under side of the gutter. If there were sufficient condensation it might drop to the floor and discolor the ceiling below. The leaders should be provided with cleanouts.

Sometimes chimneys are made water-tight by applying two or more coats of waterproofing compound with a brush on the outside and sometimes by applying it with a hot torch to help the penetration of the compound. In either case it is important to select the material and the method of application carefully. Some of these result in only temporary relief and in such cases a guarantee covering the longest possible period should be obtained. Some compounds and methods of application are likely to discolor the brickwork. The discoloration should be especially guarded against if only the masonry of the chimney and not the remainder of the masonry is to be treated since in that case both will not appear alike. Also, while they might appear alike at first they might differ in color after they are weathered.

HUMOR IN SPECIFICATIONS

(*Continued from page* 85)

RENT HOOSE:

Extend rent house iner Elevator opening—and casing the doors with galn iron.

ELEVATOR ENCLOSURES:—

Stiles and rails to be drawn from No. 18 gang strick. Joints fitted, reinforced, welded and dressed to produce invisible connections.

FIREEscapes:—

Furnish and install a fire escape extending from ground to roof. From ground to 1st landing to be a rop ladder counterweighted with hand rail—comply with House Law and Local Ordainances.

PAINTING:

All curtain twine has been taken from the Catalogue of oak as follows: Base No. 8424 stove No. 8422 Pleuth Black No. 4725 Piolure mould No. 8265.

All painting except as called for in this contract shall be under spearate contract.

This Contractor will repair all sidewalks and FInished floors of where ever it is made necessary by changes.

* * * * * * * * * * *

The reader may make his own interpretation. But, take warning, and watch your own notes to your stenographer, see that they are readable and then, see that they have been properly read and typed by rereading the specification and making necessary corrections therein before sending it out to the building world, so ready, so quick to ridicule the misstep of the architect, which includes the architect in embryo.

PUBLICATIONS OF INTEREST TO THE SPECIFICATION WRITER.

(*Continued from page* 87)

Improved Mechanisms in Builders' Hardware.—Complete catalog showing detail drawings, and instructions for installing mechanical builders' hardware such as casement hinges, casement operators, hinges and pivots, and overhead door checks. Catalog is 6 x 9. 58 pp. The Oscar C. Rixson Co., 1210 Architects Bldg., New York City.

Hotel, Club and Institution Installations.—Attractive illustrated booklet devoted to the complete furnishings of hotels, clubs and similar buildings. Many full page engravings. 6 x 9 in. 32 pp. Albert Pick & Co., 208 W. Randolph St., Chicago, Ill.

Published by the same firm, "School Cafeterias," covering subjects of cafeteria planning and equipment and "Kitchens," a practical book dealing with the layout and complete equipment of various types of kitchens.

Marble Portfolio.—Loose-leaf portfolio showing 40 different varieties of marble in their natural colors. Color plates 6 x 8. A copy of this portfolio handsomely bound in leather will be sent only to architects applying for it on their own letterhead. Tompkins—Kiel Marble Co., 505 Fifth Ave., New York City.

Structural Pressed Steel.—Booklet dealing with floors, roofs and partitions. Many illustrations, diagrams and details. Tables. 24 pp. 8½ x 11. Truscon Steel Co., Detroit, Mich.

Rookwood Pottery.—Loose-leaf portfolio showing applications of Rookwood tile to various types of rooms in different classes of buildings. 9 x 12. 60 plates. Rookwood Pottery Co., Cincinnati, Ohio.

Doric and Gothic Brick.—Brochure in color showing artistic brick work. Chapter on the art of stippling. 32 pp. 6 x 9. Western Brick Co., Danville, Ill.

Published by the same firm, The Cloister Brick, brochure showing adaptability of this brick in the modern residence and apartment, schools and churches, public buildings, factories and warehouses. Color plates. 32 pp. 6 x 9.

Ambler Asbestos Shingles.—Profusely illustrated handbook covering the subject. Photographs and drawings. Color plate. 60 pp. 6 x 9. Asbestos Shingle Slate & Sheathing Co., Ambler, Pa.

Published by the same firm. Ambler Asbestos Building Lumber. Catalog A.B.L. Useful data on Asbestos Lumber, a material of wide adaptability in building construction. 36 pp. 8½ x 11. Ambler Asbestos Corrugated Roofing. Engineers' data sheet. Full of detail drawings and practical helps. 40 pp. 8½ x 11.

Humphrey Service Manual.—Attractive booklet covering subject of gas water heating and heaters, illustrated in colors. Cross section, tables, layouts, diagrams and complete specification data. 32 pp. 8 x 11. Humphrey Co., Kalamazoo, Michigan.

Economies in Building with Iron that Lasts.—Booklet for architects, engineers and others interested in better building materials. List of products made of Armco Iron. 8½ x 11. American Rolling Mill Co., Dept. F, Middletown, Ohio.

Published by the same firm. The Story of Commercially Pure Iron. Treatise on rust-corrosion in relation to building. Much information for the architect and specification writer. 50 pp. 8 x 12.

Roofing Specifications.—Forms covering extra heavy built up roof and standard built-up roof. Flashings, materials, and application are considered. Drawings showing actual construction. Bird & Son, Inc., East Walpole, Mass.

Elevator Door Hangers.—Portfolio of plates covering ball-bearing door hangers of various types. Also booklet on garage door hardware. Wagner Mfg. Co., Cedar Falls, Iowa.

Every Architect and Draftsman a Salesman

IN THE August issue of *The Charette,* a bright little journal published by the Pittsburgh Architectural Club, there is a letter addressed to the Editor, from which we quote as follows:

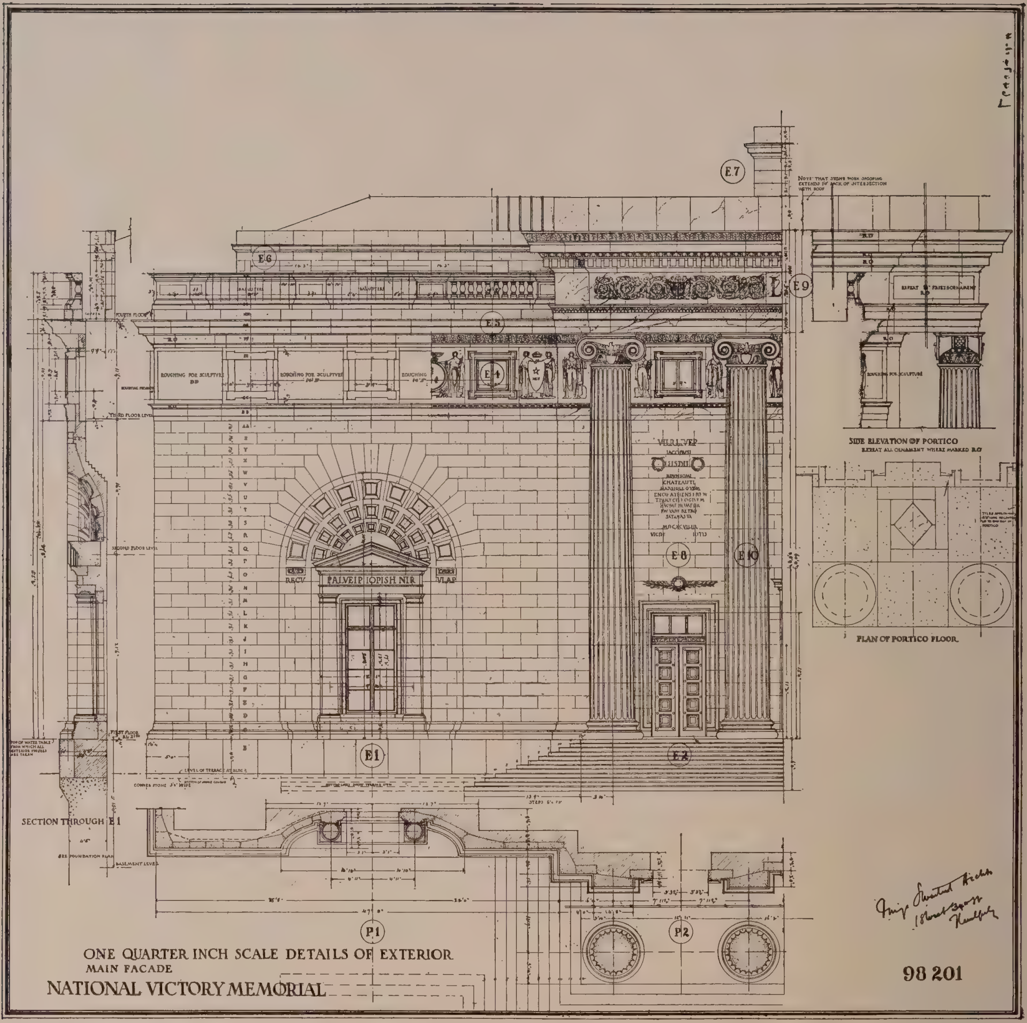
> "For example, how does the general public know that a trained architect can plan even a small house more skillfully than the contractor or someone else in the contractor's class?
>
> "If the writer is not mistaken, the general public has exactly the opposite impression. We fancy that nine out of ten men in the street believe that any contractor of experience can design a more practical house and for considerably less money than any architect. It seems to us that the reason for this state of affairs is that the architects are exceedingly indifferent in the matter of educating the public to the real facts."

In slightly modified forms this same story comes to us from various parts of the country, sometimes from architects and sometimes from members of the drafting fraternity who are working toward architecture as their life work and who are disturbed by the lack of appreciation of the value of professional services as manifested by the general public and as affecting their future professional careers.

We recently heard of a city of some sixty thousand where the average architect's fee, including full service, is 3%. We asked one of the architects located there how it happens that such an inadequate scale of compensation prevails. His answer was that the clients would not pay more, that if the architects did not take the work on that basis, there wouldn't be any architect. In other words, the jobs would go direct to the builders, and professional services would be entirely dispensed with. What's the matter with that town and lots of other towns and why do similar conditions prevail on an enormous volume of work even in the larger cities? There is no use quarreling with your public. It doesn't do any good to say the owner is a fool and ought to know better. If he does not know better, and does not more fully realize that a competent architect can save him money and give him a better building than he would otherwise get, the blame lies squarely with the architectural profession and not with the client. In our editorial which appeared in the August issue entitled "Selling Architecture," we suggested one means whereby the architect, which includes the draftsman, may improve his standing as an economic factor in the community. There is another way in which this situation may be improved. Every architect and every architectural draftsman who has the good of his profession at heart must take off his coat and become an active, aggressive selling force for the benefit of the entire profession. There are many things that may be done—all coming within the highest ethical standards and all perfectly legitimate considered from the highest professional viewpoint. Contacts should be made either by clubs or individuals with the local newspapers; not in any sense to run down the builder, but to set forth for the consideration of business men and intending home builders the reasons (and they are many and clear) for employing an architect. A certain amount of time may be required to furnish articles or interviews for the press and in the preparation of drawings to be used as illustrations for such articles. But this time will be well spent. Those taking active part in this movement should work in a broad way for the better education of the community rather than to attempt to further their own individual interests. Contacts should be made with Chambers of Commerce, Rotary and other clubs, and organizations and lectures arranged, designed to demonstrate that it pays from the dollars-and-cents standpoint to have a building well planned, well designed and carefully superintended; and that the money spent for the professional services involved will be reflected in initial savings, larger rentals, higher sales value and lower upkeep.

These problems have always faced the profession, and much good and earnest work is being and always has been done by many individuals and some organizations. The draftsmen as a class have never been conscious that this problem was their problem just as much as it is that of the boss, and they have not as a class been aware of the great good they could do in "selling" architecture. Every architectural club should actively consider this problem as part of its program for this winter. In many communities where clubs do not exist, groups of architects and draftsmen can and should get together to make definite plans to improve conditions in their particular community. The word "education" is worked to death, but what we are talking about is purely a matter of education and should be approached as an educational matter; dispassionately and without any feeling of pique or ill-will. We hear that Mr. Jones, the rich banker, has just let a contract for a fifty thousand dollar residence to a builder and is employing no architect. He has been told that an architect is a nuisance anyway, that he can save several thousand dollars by getting along without one and get just as good a house from the builder. No use getting sore about this, but you should see that this does not happen again in your town. All the Mr. Joneses by one means or another should be brought to know the truth. He really doesn't want a house done from a plan factory book without any consideration of the peculiar needs of himself and family, without any thought to the site and without any of the other refinements which only an architect can give. He lets the contract to the builder because he doesn't know any better, and to stand by and watch him get into a mess and spend a lot of money he didn't expect to in getting out of it, should not be a source of satisfaction to any one.

Let every draftsman, especially, realize that his professional future, whether he ever opens up an office for himself or not, depends to a certain measurable extent upon his efforts and the efforts of all the draftsmen to "sell" architecture in every legitimate way. The architect's problem is not quite as simple as that of other professional groups; doctors and lawyers, for example. If you have a pain, you go to a doctor; if you get into legal difficulties, you go to a lawyer; the necessity for these professional services is understood by every one in a community. As stated above, the importance of the architect's services is by no means so universally appreciated. In remedying this situation, the initiative must be taken by the profession—nobody else will do it. But a tremendous amount can be accomplished if every architect and every draftsman will make a determined and patient effort to explain the value and importance of professional services in connection with all building operations.


ONE QUARTER INCH SCALE DETAILS OF EXTERIOR
MAIN FACADE
NATIONAL VICTORY MEMORIAL
98 201
SECTION THROUGH E1
SIDE ELEVATION OF PORTICO
REPEAT ALL ORNAMENT WHERE MARKED R.O
PLAN OF PORTICO FLOOR
ROUGHING FOR SCULPTURE
E1
E2
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VLAP

Details of Exterior, National Victory Memorial, Washington, D. C. Tracy & Swartwout, Architects.

WORKING DRAWINGS, THE CONTRACT SET

BY EGERTON SWARTWOUT

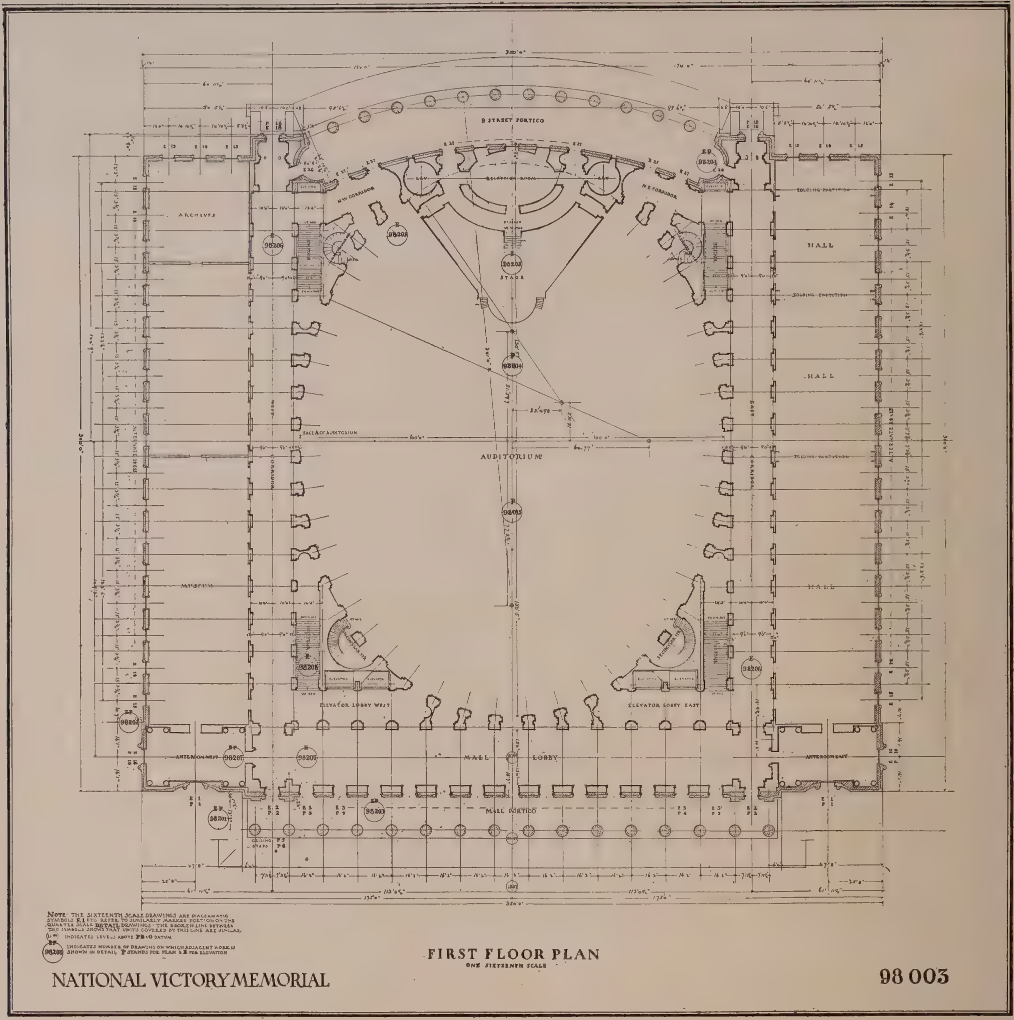
IT MAY seem a piece of gratuitous information to say that working drawings are the drawings by means of which the building is built, but this little fact is quite generally ignored by those who seem to regard working drawings either as a vague indication of a scheme which will be shown in detail on shop drawings prepared by someone else, or as vehicles for the display of draftsmanship of a most confusing and complicated nature. Recognizing, then, that working drawings have a practical value and are not works of art, it is evident that to fulfill the purpose for which they are made they must be complete, they must be intelligible to the dumbest mechanic, and they must be convenient to handle.

Take the last point first, the question of size, and in the consideration of this and the other points let us assume that I am speaking of some monumental work, as I have had more experience with that than with any other. In monumental work the drawings are generally at one-eighth scale. The drawings we made for the Denver Post Office were at that scale and were about four feet by five, difficult and expensive to make and unwieldy in the field. The drawings for the Missouri Capitol were worse; about four by seven feet, and with the mechanical and structural drawings there were seventy of them, together forming a roll that had to be carried around in a wheelbarrow. As a matter of fact, they didn't carry them around, they tore off pieces and put them in their pockets. I never saw a complete set on the job, and I don't think we would ever have built the building if we hadn't had photostat copies made. To be sure, you had to carry a magnifying glass to read the figures, but the plans reduced made a nice little roll that could be carried handily.

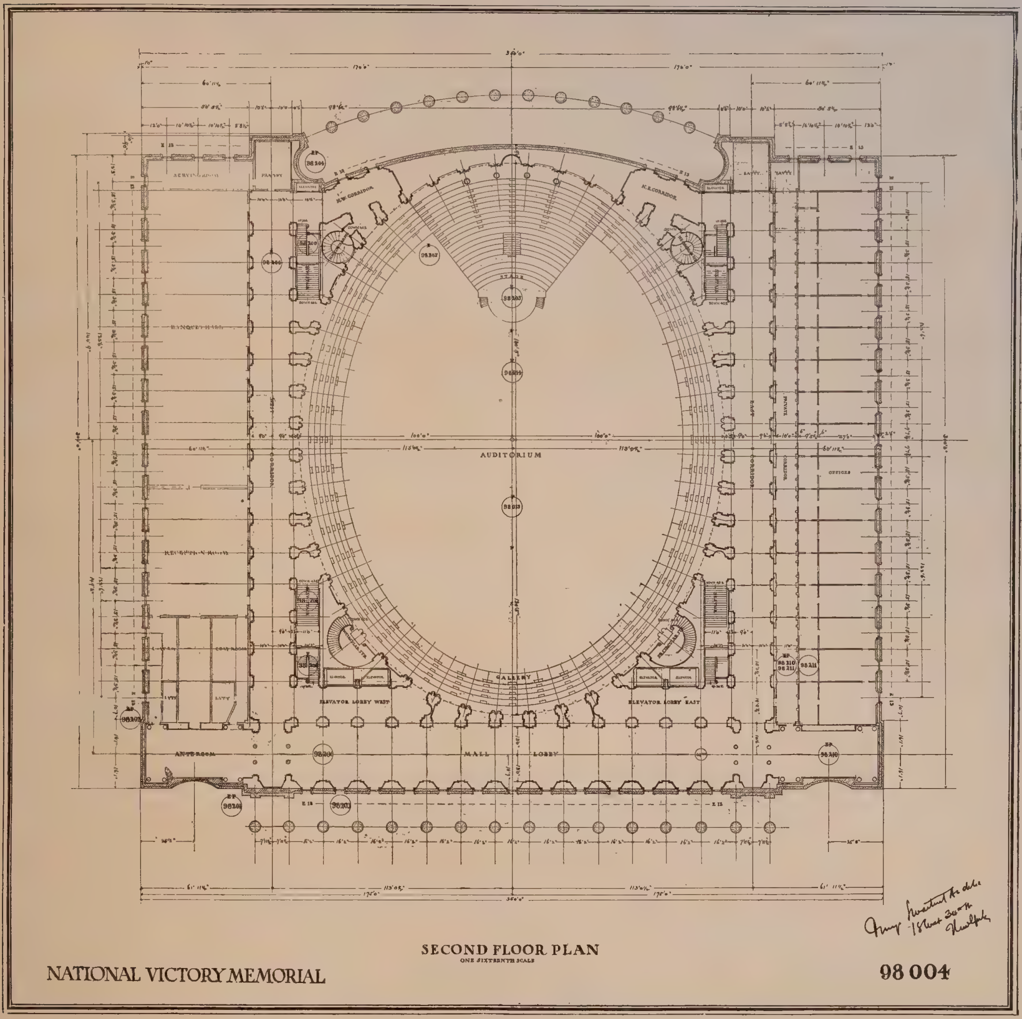
With this experience in mind we set about some three years ago to make the working drawings for the George Washington Memorial. The building itself was about 300 x 300 feet exclusive of porticos and approaches; not as long as the Missouri Capitol, but wider. Eighth scale was impossible. We thought first of making the plans in two sections on different sheets but that would have been unhandy. The engineers told us sixteenth scale was too small for their work, and yet we did not want big drawings. It occurred to me that, after all, the small scale drawings are only diagrammatic. Eighth scale was too big to be diagrammatic for a building of that size, and too small in scale to show detail, and if the general drawings were only diagrammatic, sixteenth would answer if the drawings were kept simple and were supplemented by large size details. And that is the way the drawings were made; and they were, including border, just 30 inches square. The general drawings at sixteenth were left in simple outline, the masonry shown in the usual manner, but the terra cotta partitions only in outline, the outline being strengthened by a pencil line just inside of the ink. The center lines of the windows and the steel columns were shown and figured and the general dimensions put on. The elevations were in outline and no foundations were shown as is usually done, but the elevations started at the terrace level. The foundations were of pile and quite complicated and were shown clearly on the structural set at eighth scale, and there was no need at all of cluttering up the elevations with useless duplication. In the elevations the openings were numbered, all similar openings having the same number, the number being prefixed by a letter indicating the character. This was explained by a note on the drawings which read: "The sixteenth scale drawings are diagrammatic. Symbols El etc., refer to similarly marked portions on the quarter scale detail drawings. The broken line between two symbols shows that units covered by this line are similar. The number 98208 for example enclosed in a circle with E-P above indicates the number of the drawing on which adjacent work is shown in detail. E stands for elevation and P for plan." For instance, you see on the elevation a row of windows marked E-13 and you are referred to No. 98202. This drawing is at quarter scale and E-13 is here fully drawn and figured and all stone joints and detail shown for the entire bay. Therefore, a man taking off the quantities lists carefully one bay from the detail and gets the number of bays from the general drawings. Not only windows but all parts of this elevation are numbered, columns, entablature, balustrades, even inscriptions.

The same system applies to the plans and to the sections and interiors. The plan of the elliptical auditorium was so complicated that it was drawn at eighth scale, getting one-half the plan on a sheet. These drawings were carefully figured and were supplemented by a sheet of details at quarter. The interiors were generally drawn at quarter scale, or rather parts of them were, for we had no repeats; if all the openings were alike we only showed one, carefully drawn and figured. The stairs were all drawn out complete at quarter and there were numerous structural sections at that scale. The exterior details were very carefully figured. To obtain these figures some of the parts were studied at three-quarter scale and some at full size. We also showed levels very freely on the plans, sections and elevations, giving the level in decimals in relation to the established datum, the figures being ringed for greater distinction. These levels were exceptionally valuable in the roof plan showing heights of copings and roof grades.

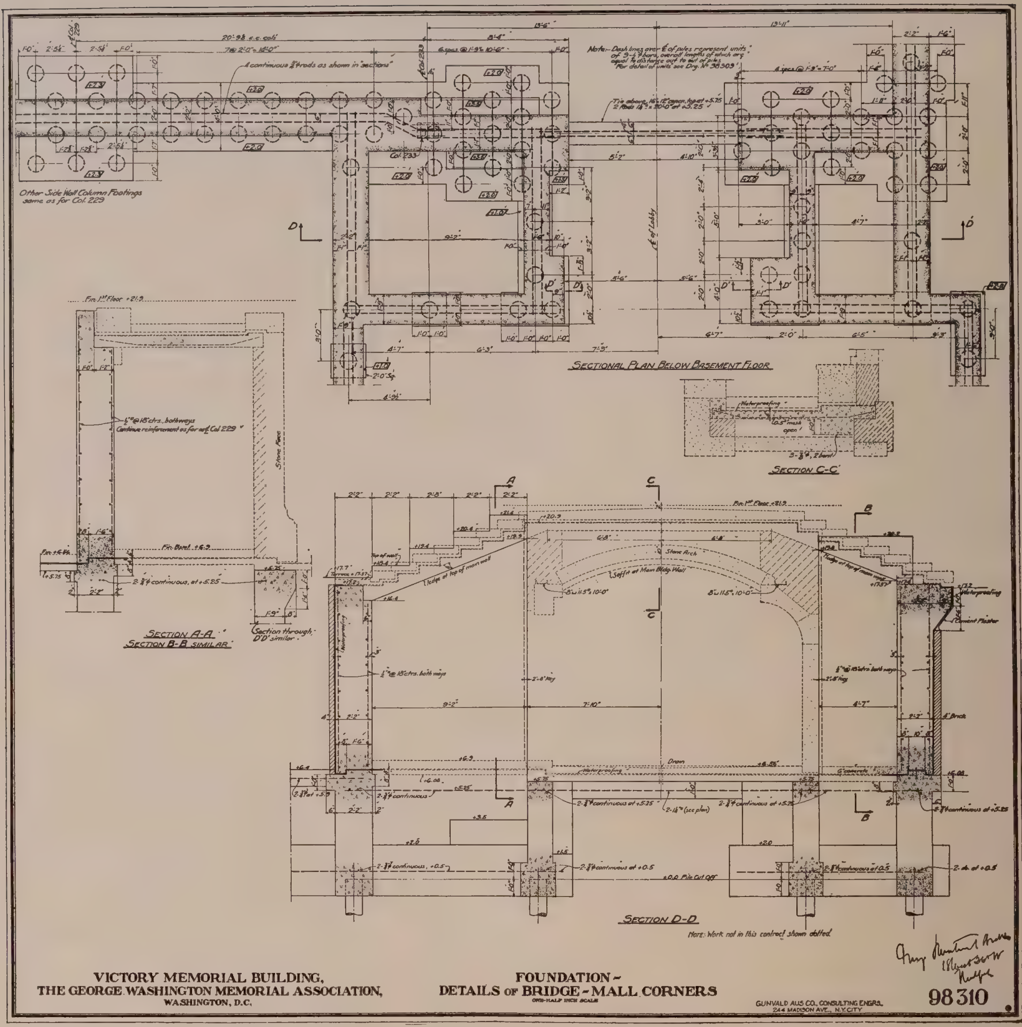
In all there are 24 sheets and everything is shown complete except the terrace which was not to be included in the then contract, and the finish of certain rooms on the first and second floors which was at



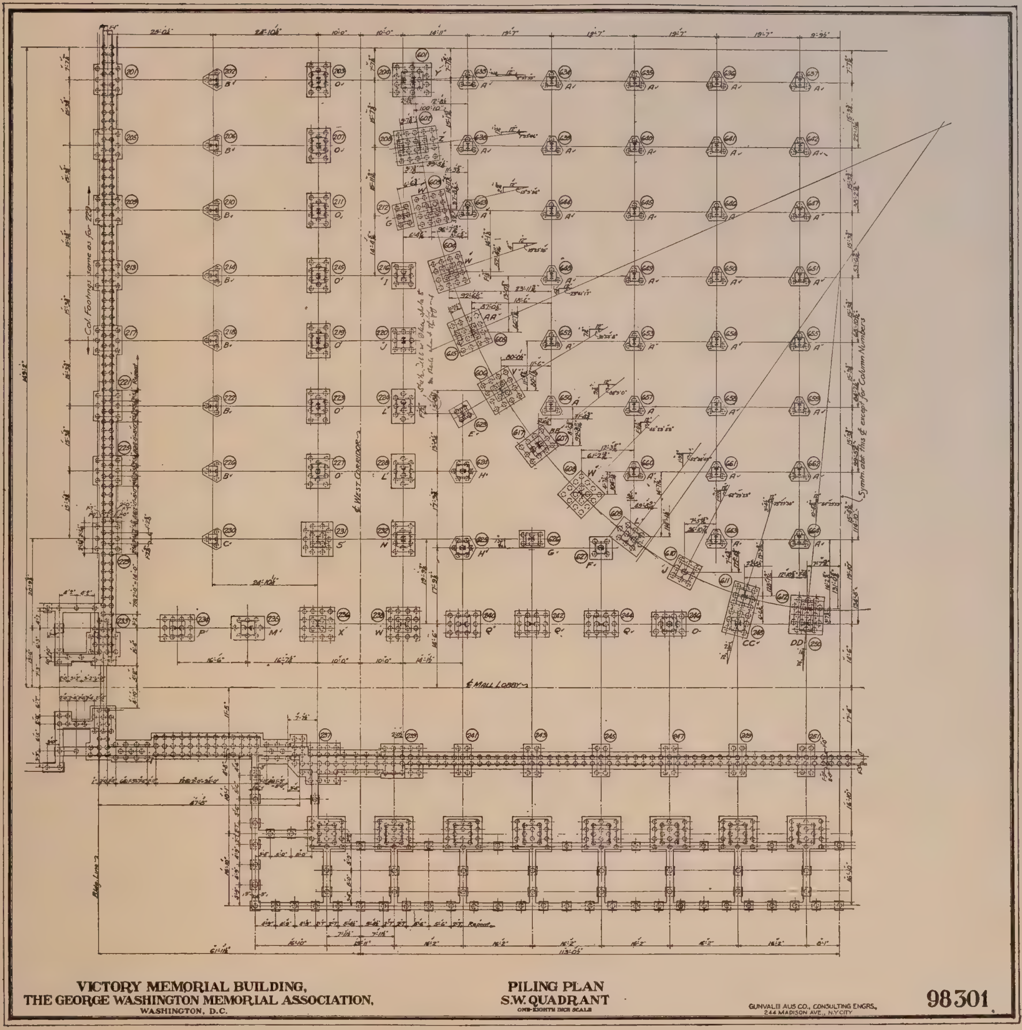
First Floor Plan, National Victory Memorial, Washington, D. C. Tracy & Swartwout, Architects.



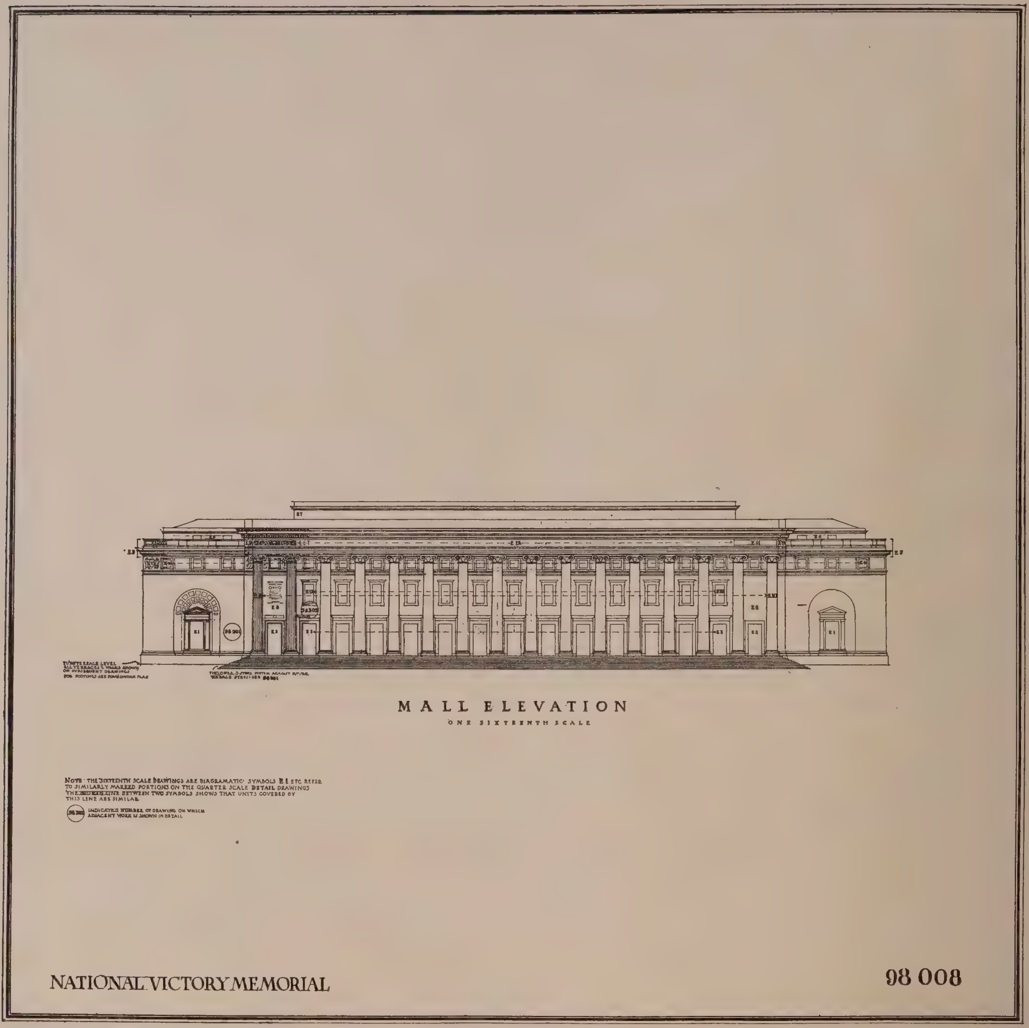
Second Floor Plan, National Victory Memorial Washington, D. C. Tracy & Swartwout, Architects.


SECTIONAL PLAN BELOW BASEMENT FLOOR
Other Side Wall Column Footings same as for Col. 229
SECTION C-C
SECTION A-A
SECTION B-B SIMILAR
Section through D'D' similar
SECTION D-D
Note: Work not in this contract shown dotted.
VICTORY MEMORIAL BUILDING,
THE GEORGE WASHINGTON MEMORIAL ASSOCIATION,
WASHINGTON, D.C.
FOUNDATION –
DETAILS OF BRIDGE – MALL CORNERS
ONE-HALF INCH SCALE
GUNVALD AUS CO., CONSULTING ENGRS.
244 MADISON AVE., N.Y. CITY
98310

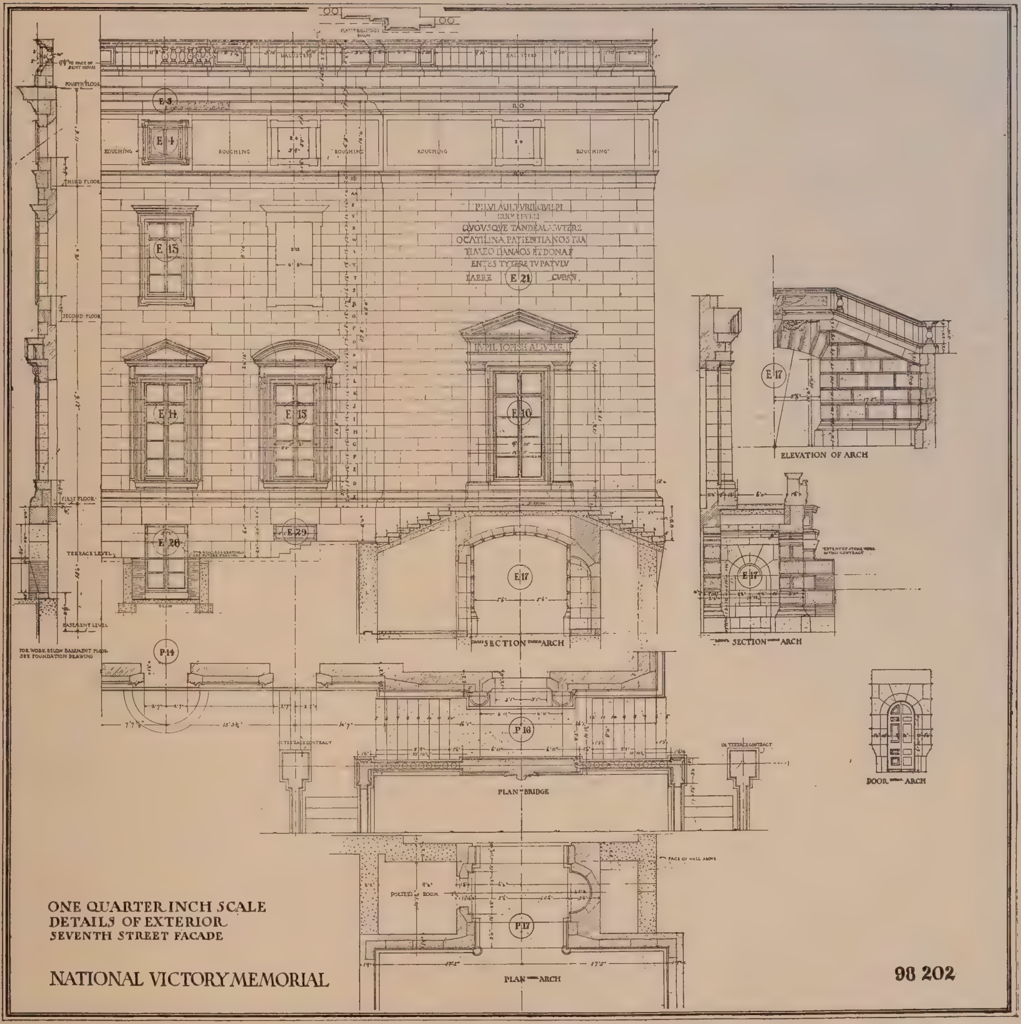
Foundation—Details of Bridge-Mall Corners, National Victory Memorial, Washington, D. C. Tracy & Swartwout, Architects.


Col. Footings same as for 229
℄ West Corridor
℄ Mall Lobby
Symm. abt. this ℄ except for Column Numbers
Bldg. Line
VICTORY MEMORIAL BUILDING,
THE GEORGE WASHINGTON MEMORIAL ASSOCIATION,
WASHINGTON, D.C.
PILING PLAN
S.W. QUADRANT
ONE-EIGHTH INCH SCALE
GUNVALD AUS CO., CONSULTING ENGRS.,
244 MADISON AVE., N.Y. CITY
98301

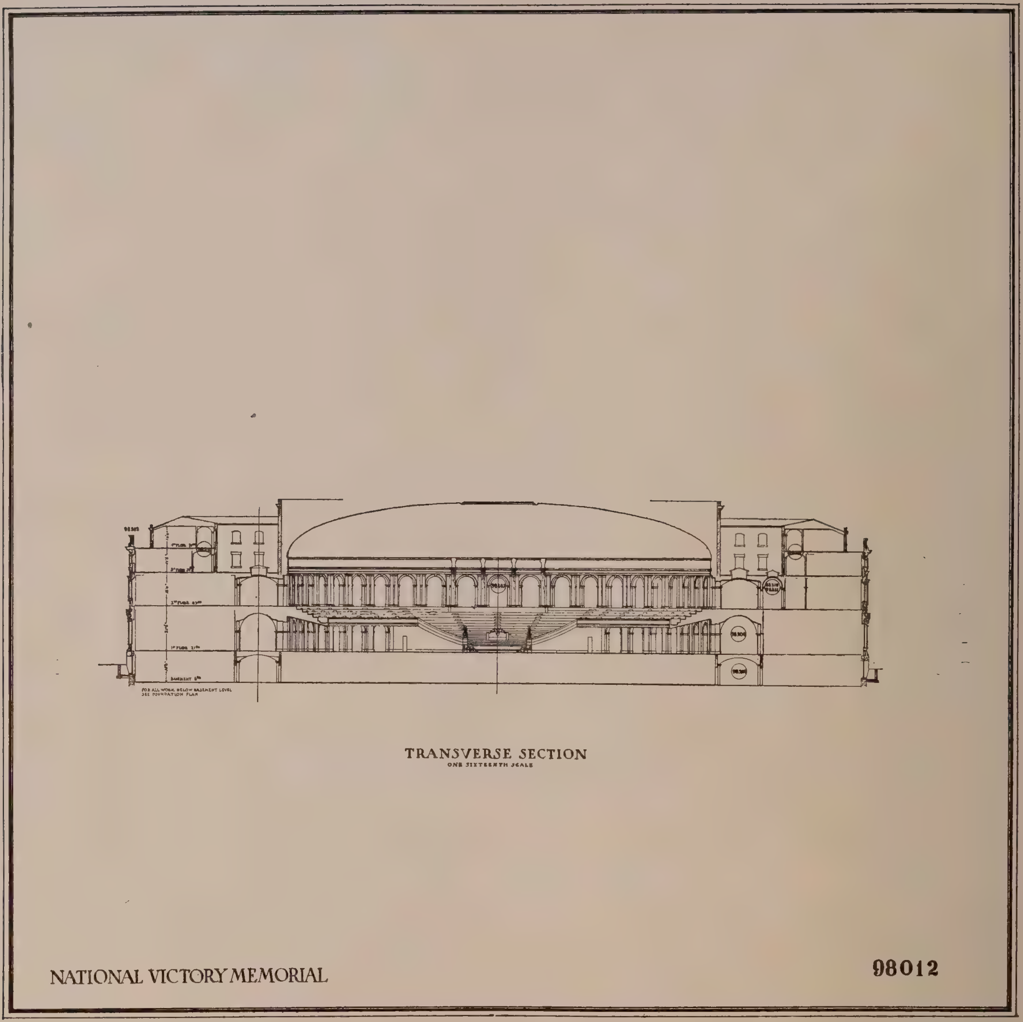
Piling Plan, S. W. Quadrant, National Victory Memorial, Washington, D. C.
Tracy & Swartwout, Architects.


MALL ELEVATION
ONE SIXTEENTH SCALE
TWNEW TERRACE LEVEL
ALL TERRACES & WALKS SHOWN ON SUBSEQUENT DRAWINGS
FOR FOOTINGS SEE FOUNDATION PLAN
THE LOWER 3 STEPS FINISH AGAINST FUTURE TERRACE STEPS SEE 98 201
E 1
98 202
E 2
E 3
E 8
98 203
NOTE · THE SIXTEENTH SCALE DRAWINGS ARE DIAGRAMATIC · SYMBOLS E 1 ETC REFER TO SIMILARLY MARKED PORTIONS ON THE QUARTER SCALE DETAIL DRAWINGS THE BROKEN LINE BETWEEN TWO SYMBOLS SHOWS THAT UNITS COVERED BY THIS LINE ARE SIMILAR
98 202 INDICATES NUMBER OF DRAWING ON WHICH ADJACENT WORK IS SHOWN IN DETAIL
NATIONAL VICTORY MEMORIAL
98 008

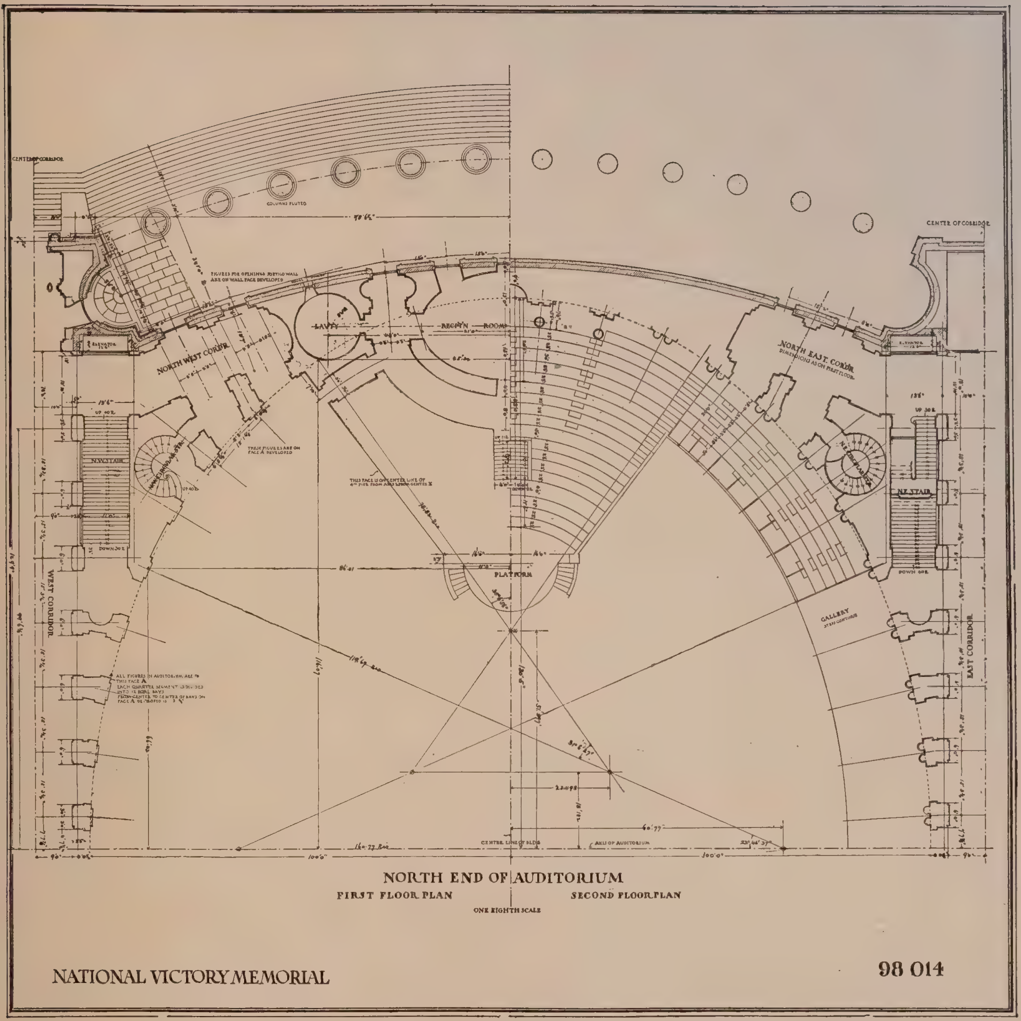
Mall Elevation, National Victory Memorial, Washington, D. C. Tracy & Swartwout, Architects.



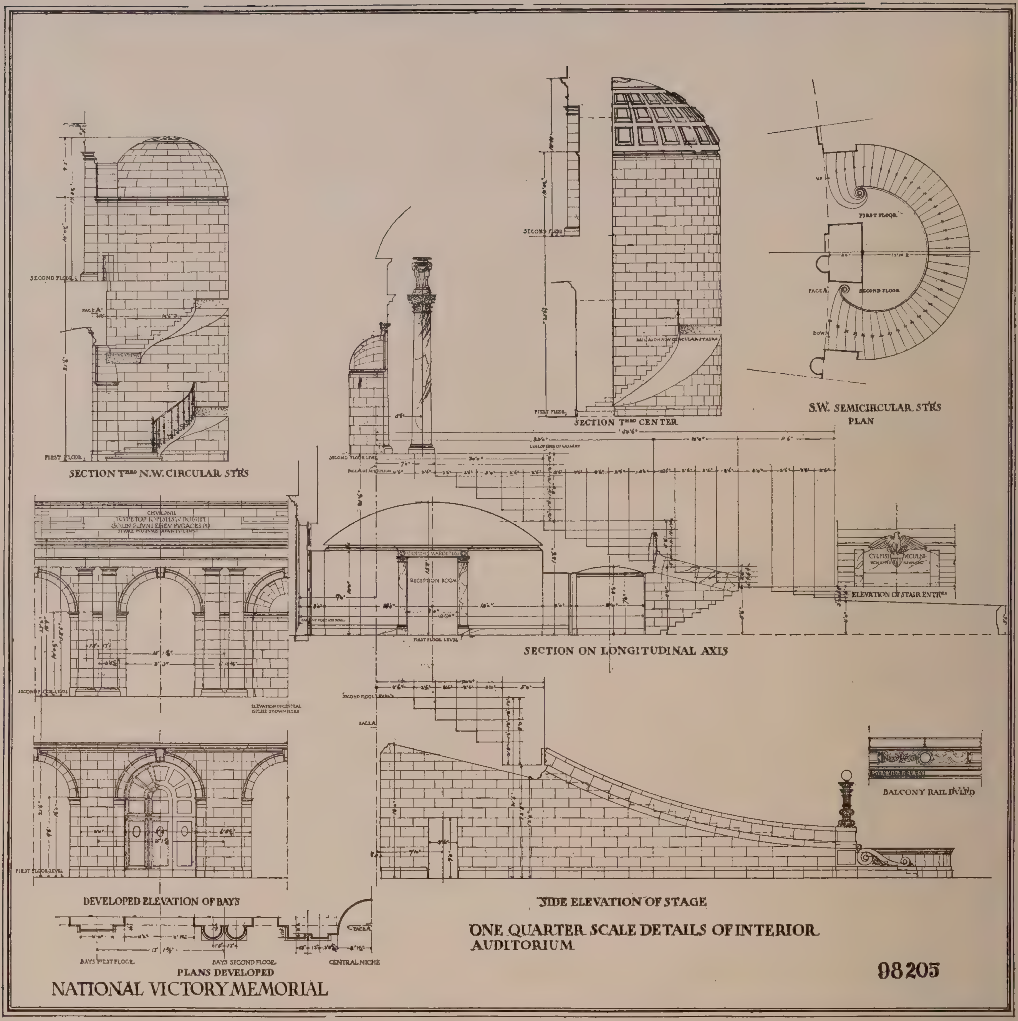
Details of Exterior, National Victory Memorial, Washington, D. C. Tracy & Swartwout, Architects.



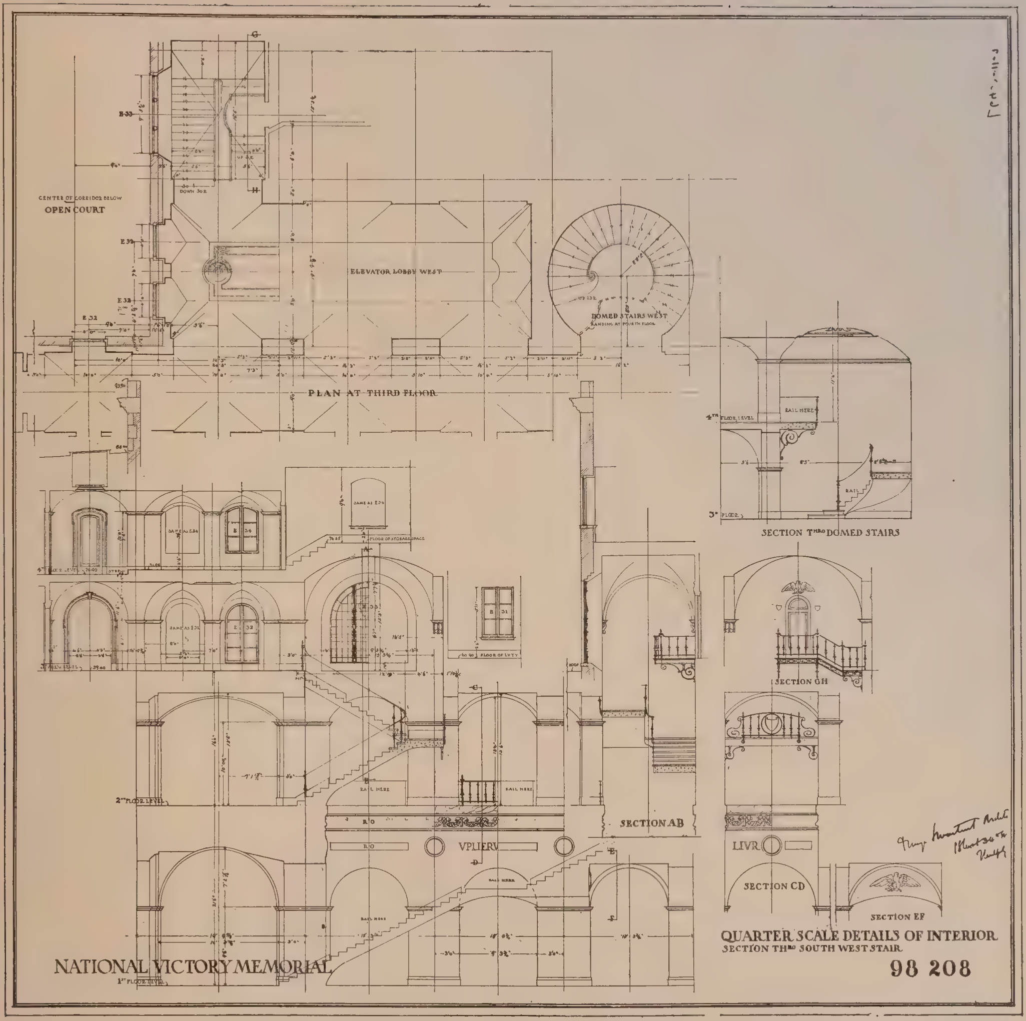
Transverse Section, National Victory Memorial, Washington, D. C. Tracy & Swartwout, Architects.



North End of Auditorium, National Victory Memorial, Washington, D. C.
Tracy & Swartwout, Architects.



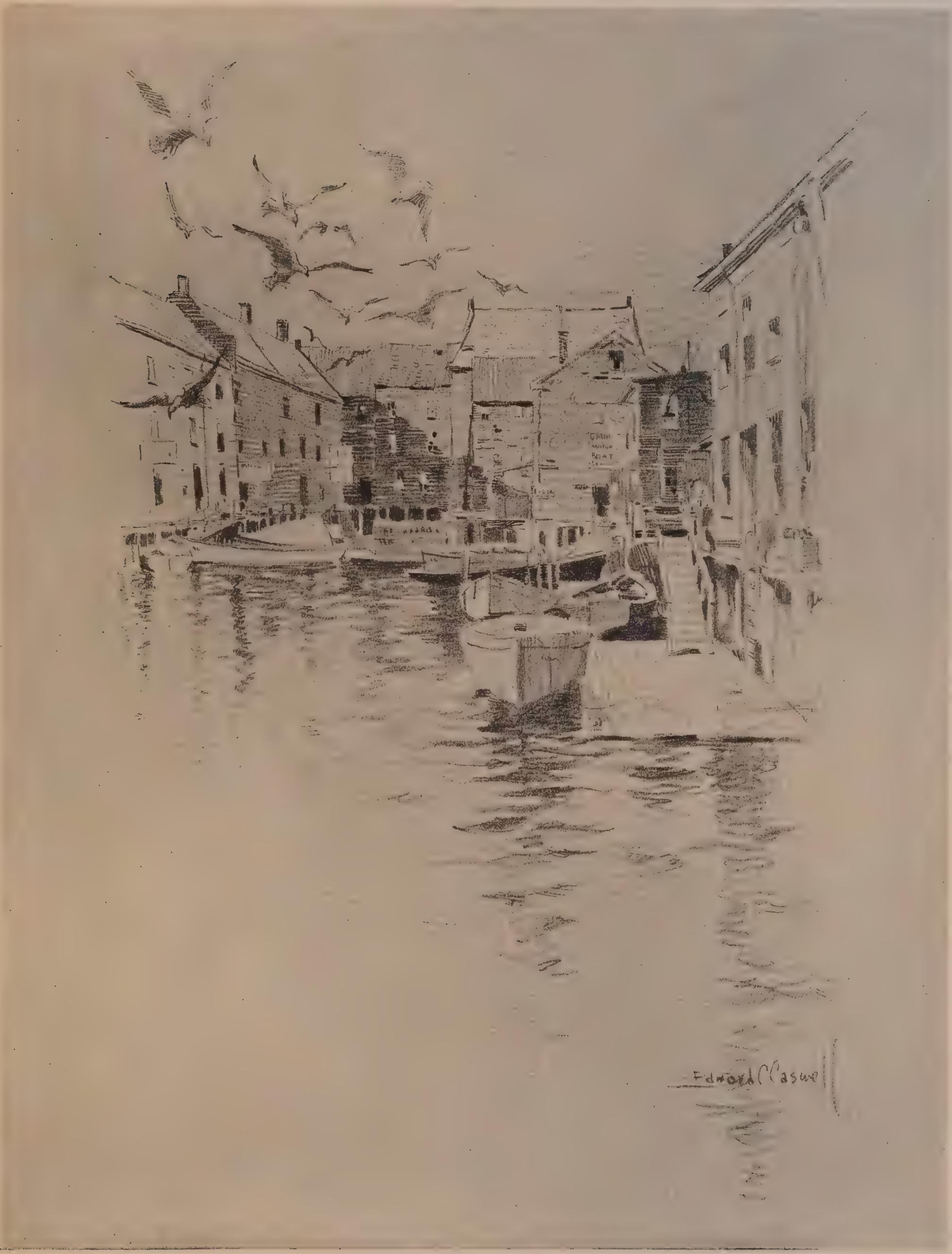
Details of Interior of Auditorium, National Victory Memorial, Washington, D. C.



Details of Interior, National Victory Memorial, Washington, D. C. Tracy & Swartwout, Architects.

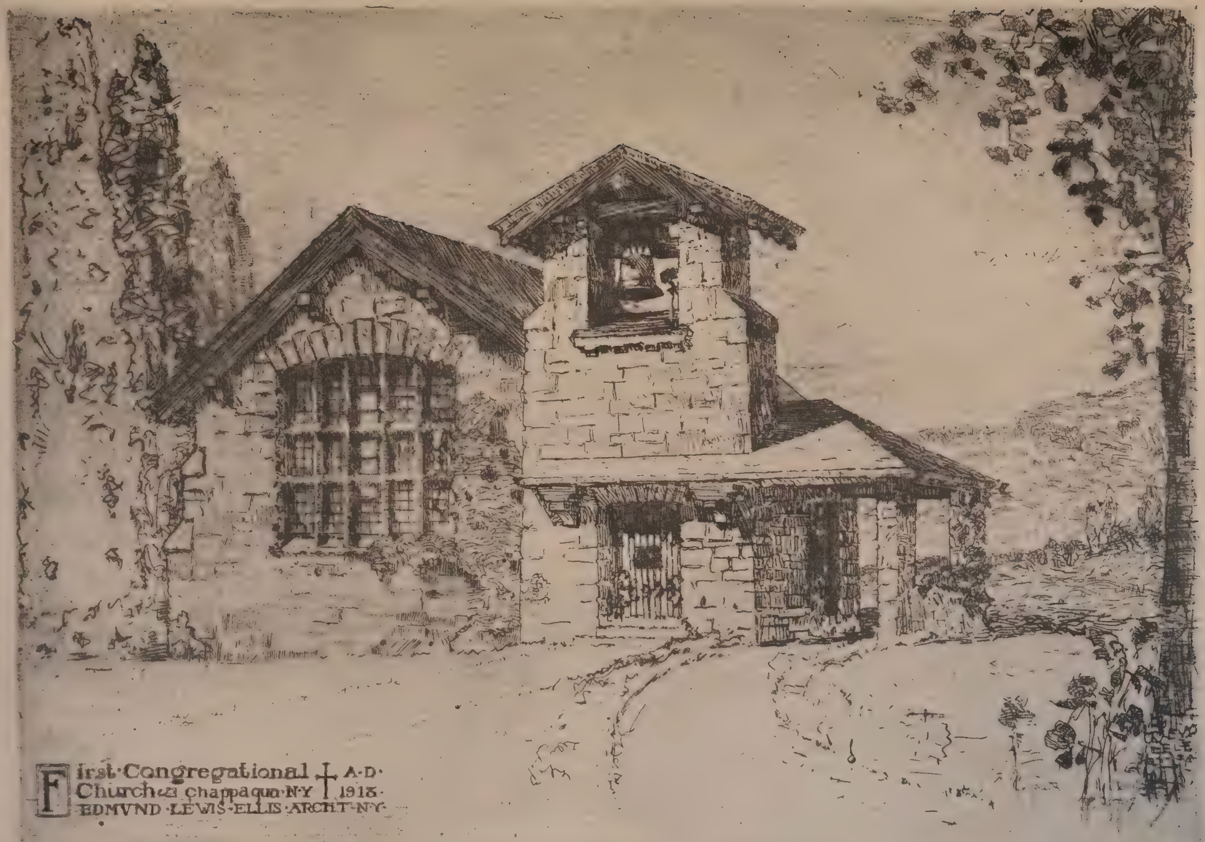
that time undecided. It will be noted that the steel is not shown on the plans, and there are two reasons for it, the first and principal one being that at the time the plans were made the engineer had not been appointed. The other reason is unnecessary but it is this: we show the centers of the columns and that is sufficient for figuring. The indication of steel at such a small scale would be useless and would clutter up the plans. It is worthy of passing notice that although there was no engineer when the plans were made, there is one now, and he has made very complete and careful drawings, and has had no difficulty whatsoever in following the centers we established; and the figured allowance we made for floor thicknesses and column covering has proved in every case sufficient. We took somewhat of a chance, a chance I would not advocate as a general rule, but we had to take it in that instance. The foundations of the building are now in place and everything has worked out exactly according to our plans. Contractors who have figured the plans have told us that it was much easier to figure from them than from any others they had seen of a similar sized building, chiefly because of the convenience of handling the sheets. The information was all there and it was so simply drawn than anyone could understand it.

And there is another side to it, a side that I hesitate to stress because it may be misunderstood, the side of economy. The drawings, the contract drawings for the Missouri Capitol, a building of considerably less than half the cost of the George Washington Memorial, were four times the size of the latter and nearly three times the number. It took about eleven months to complete the Capitol drawings, and there was perhaps an average of ten men working continuously on them. The George Washington drawings took about the same time to do but only one man worked on them and he wrote the specifications. Of course the Capitol was much more elaborate, in the interior especially; there was an enormous number of special rooms that were all drawn out on the contract set, and the drawings even more elaborately finished but the George Washington set was much more practical. I only mention this comparison to show how time and money can be saved in the production of drawings by the reduction in size and the elimination of repetitious work, and that such drawings carefully made are more practical and better suited for the work for which they are intended.



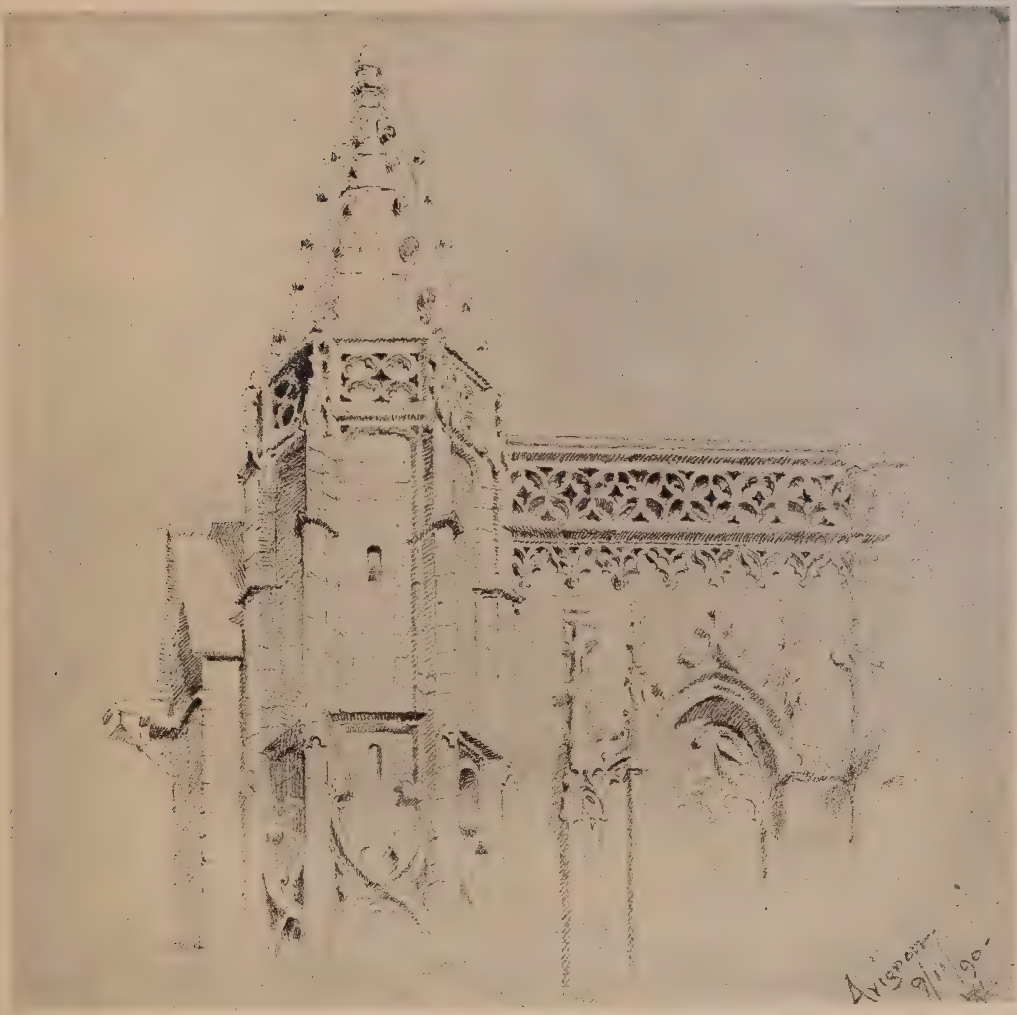
PENCIL DRAWING BY EDWARD C. CASWELL, FOR "COASTING DOWN EAST."

The sketch reproduced on the other side of this sheet is one of the many fine pencil drawings made recently by Edward C. Caswell, for "Coasting Down East," by Ethel Hueston and Edward C. Caswell, published by Dodd Mead & Co., an interesting account of a trip from Kittery to Calais.


First·Congregational A·D·
Church at chappaqua·N·Y 1918·
EDMVND·LEWIS·ELLIS·ARCHT·N·Y·

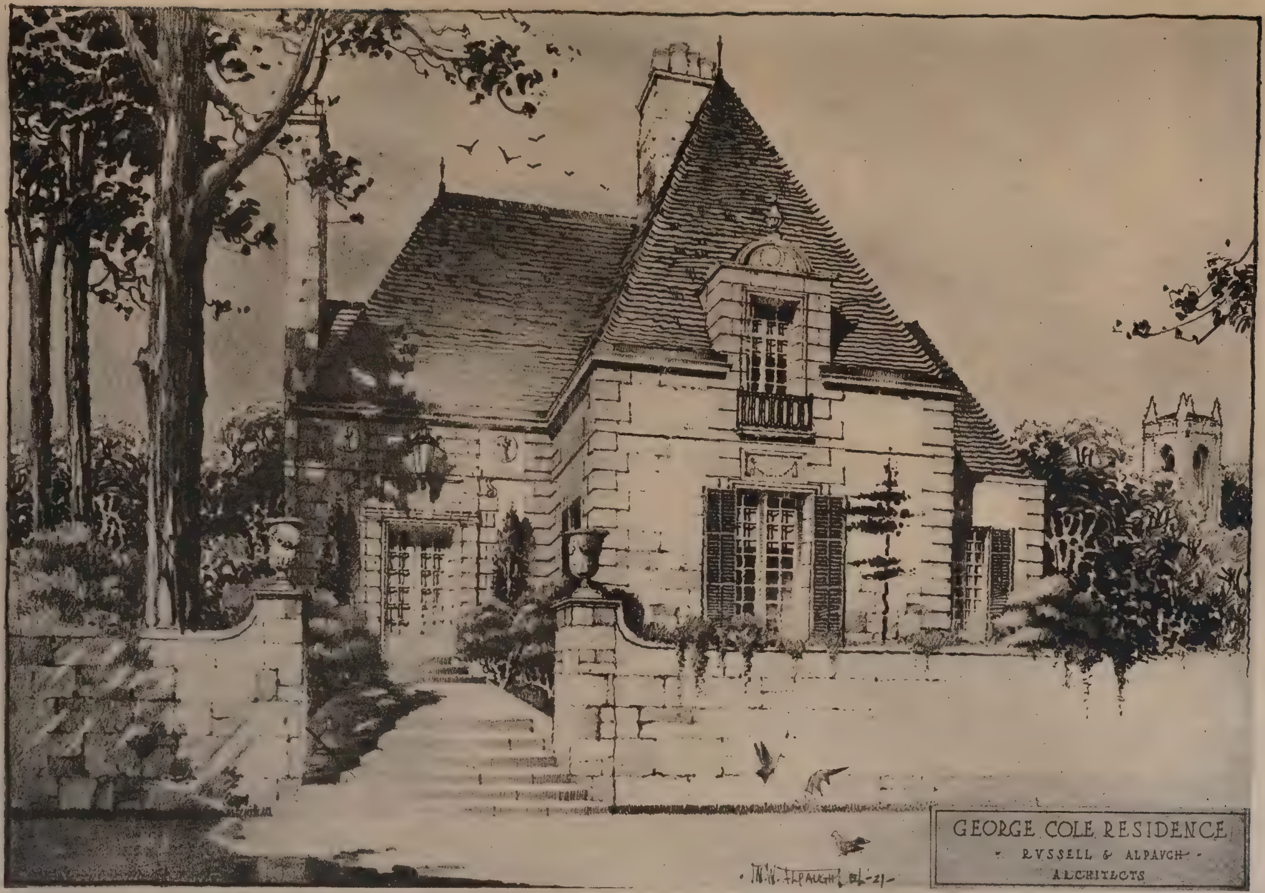
ETCHING BY EDMUND L. ELLIS

On the other side of this sheet is shown an etching by Edmund L. Ellis of the First Congregational Church, Chappaqua, N. Y., of which Mr. Ellis was the architect.. The sensiitveness and freedom of treatment well express the character of the building. Etching is a means of expression that especially well preserves the charm and dignity of an architectural subject.



SKETCH BY WALTER B. CHAMBERS—AVIGNON.

The pencil sketch, by Walter B. Chambers, reproduced on the other side of this sheet is one of the many made by Mr. Chambers in 1899, when Mr. Chambers and the late Henry Bacon were travelling in Europe. It, like the other sketches by Mr. Chambers which we have published in recent issues of this journal, is an example of pencil technique that is well worthy of careful study.



RENDERING BY NORMAN W. ALPAUGH.

The rendering by Norman W. Alpaugh, reproduced on the other side of this sheet shows the masterly technique and the charm that have made Mr. Alpaugh's drawings widely known and admired in the architectural profession. Not only is the rendering of the building excellent but the entourage is handled especially well, is given entirely satisfactory treatment while it is kept in its proper relation.

MASTER DRAFTSMEN, VI

ERNEST PEIXOTTO

ERNEST PEIXOTTO comes from "the Coast" and some of his earliest training was received in an art school in San Francisco where Frank Norris—the author of "The Octopus" and "The Pit"—was a fellow student before he turned to writing.

Back in the early nineties there appeared a magazine, brochure—book—pamphlet—it would be hard to state exactly what — or whether humor, nonsense, wit or art its motive. It was written, illustrated, edited, published — perhaps peddled — I'm not sure! —by a firm, society, group or team; but at least, by a quartet composed of Gelette Burgess, Bruce Porter, Willis Polk and Ernest Peixotto. It was called "The Lark" and it started from San Francisco and got everywhere. It made two things world-famous, world-notorious or world-popular — and it doesn't matter which. Both were published and republished wherever a printing press was to be found throughout the longitude and latitude of the globe. One was Burgess' "Purple Cow"; the other was an illustration — an impressionist study in light, shade and shadow in the medium of pen and ink; the technique of which was made up of tiny rings, giving an effect of a picture made of small beads. It was signed Peix Otto, the name appearing in the form of a fraction. Somebody told me, however, that his name was not "Otto" but "P. Shoto" and otherwise endeavored to convince me that the artist was "a Jap." (He has a Japanese manservant—hence, possibly! the confusion.)

Ernest C. Peixotto
From a portrait by Albert Sterner.

To the drawings in the *Lark,* Claude Bragdon alluded when he wrote:

"When I draw pictures for the Shark
I do not have to think,
My fingers chase the pen
And the pen chases the ink."

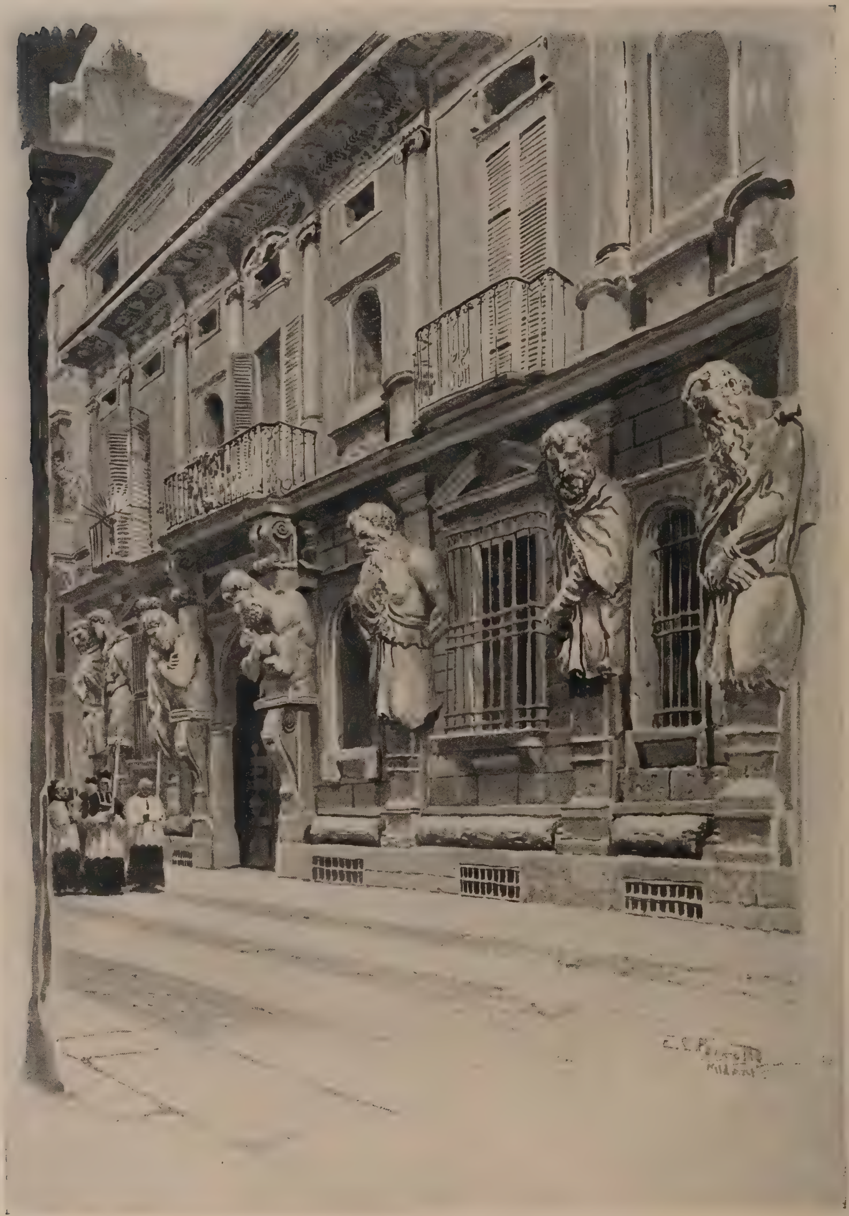
* * * * * *

"What is it Mother?"
"A freak, my Child."

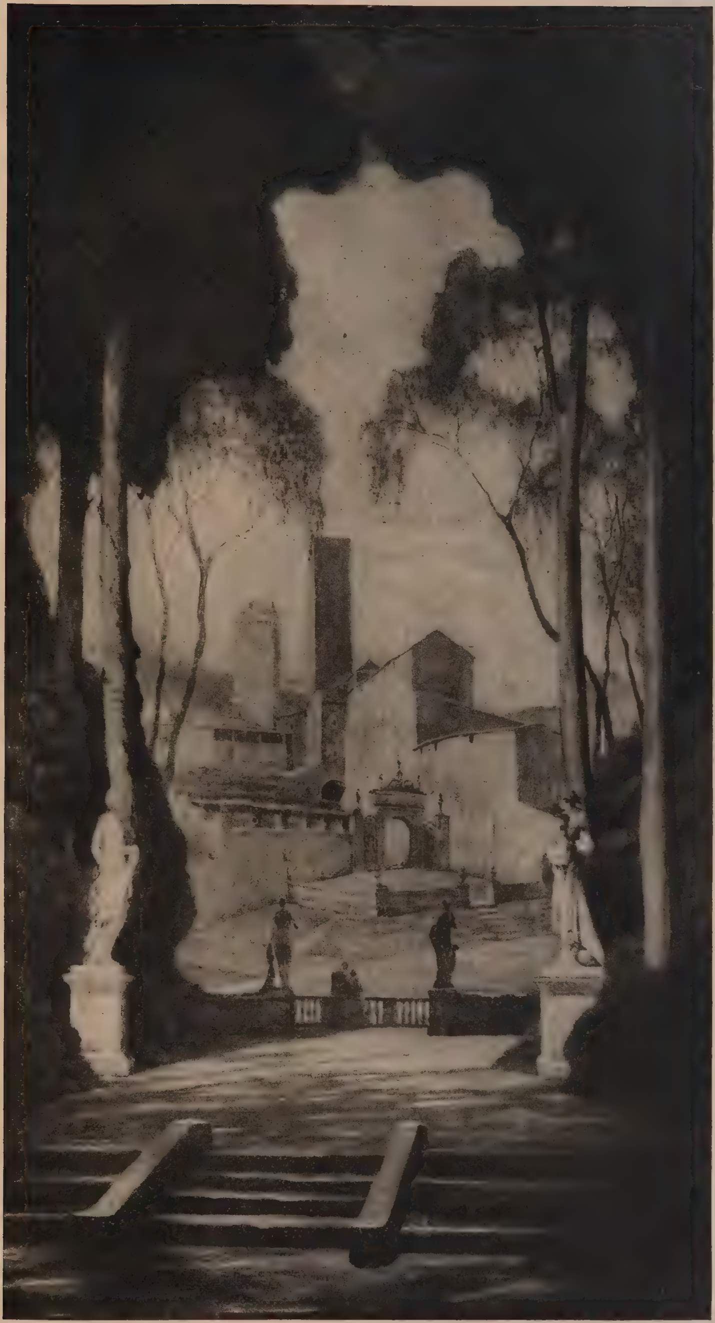
However lacking in seriousness, the "pictures" were not lacking in ideas or in originality of expression.

But later in the '90's, "Scribner's Magazine" published an article on the Boston Public Library illustrated with brilliant little sketches bearing the signature of E. C. Peixotto, who had meanwhile journeyed east, and their maker "woke up, famous." It was a time when everybody in the world of art was interested in pen-drawings. Mr. Peixotto told me of taking those drawings to the Art Editor of "Scribner's," who said, "We must take these over to the architects to see what they think." So they went together to the office of McKim, Mead and White. Stanford White greeted the sketcher with buoyant approval — his usual first enthusiasm—but casually remarked of the arches in one drawing, which were rather stilted, "But ours are fifteenth century arches and yours are sixteenth century." Peixotto ventured a word or two in defense of his perspective; and White quickly replied, "Oh, yours are much *better!* Fine, *fine!"*

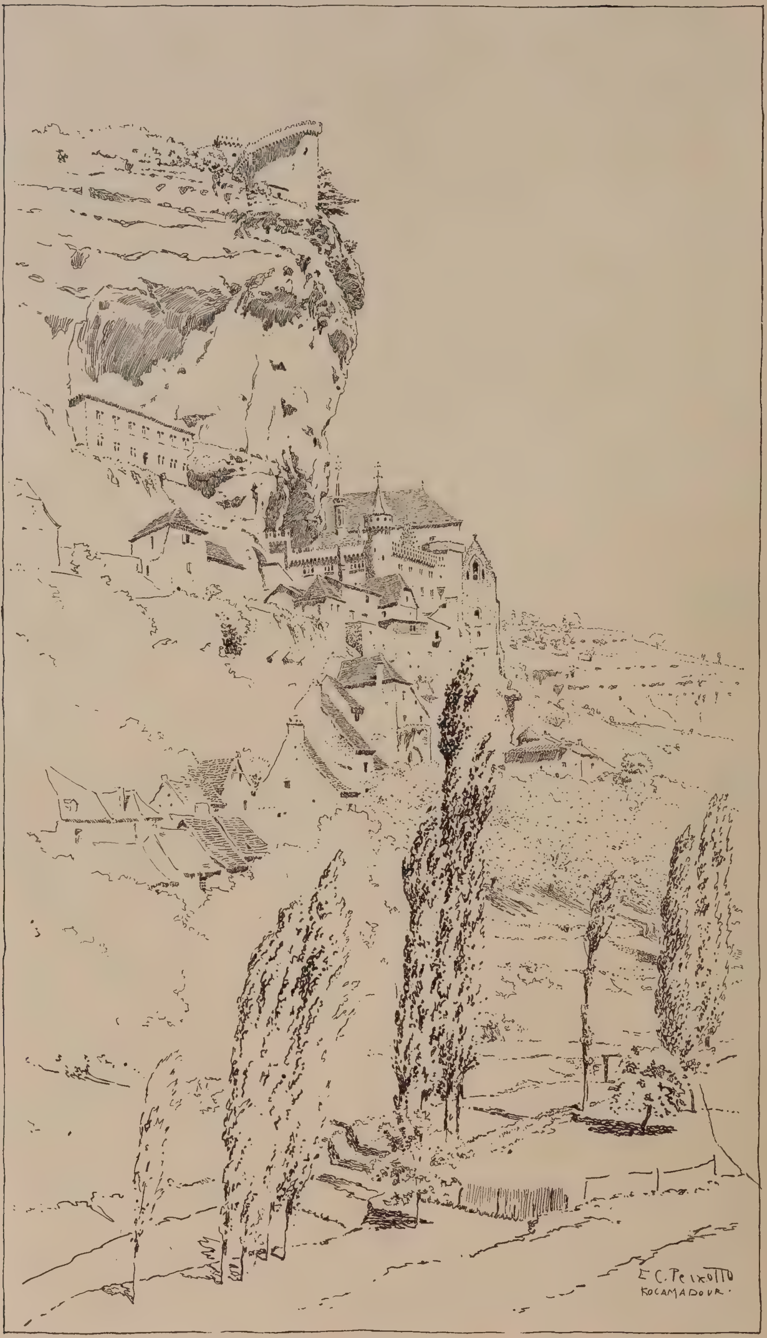
Soon afterwards "Scribner's" sent Peixotto to Europe to make some sketches. The trip was to have been "for a few weeks"; but more and more sketches and articles were demanded and Mr. and Mrs. Peixotto continued to spend several years in Europe travelling about from place to place, he making sketches and both he and she writing entertaining descriptive articles. The work grew to volumes as popular demand increased. Hundreds of readers of "Scribner's" themselves prepared to spend "A Summer in Sabots" in Holland, "A Summer in a Gondola" in Venice, or a "Mostar" or "Loches," attracted by the alluring stories and the sketches which displayed fairyland on a solid foundation. A "travelling exhibition" of Peixotto's sketches was sent out through the western cities. Harvey Ellis and I went together to see it and I recall well his comments: "Watch that young man's



Drawing in Wash by Ernest C. Peixotto. Palazzo Besano, Milan.
Courtesy of Scribner's Magazine.

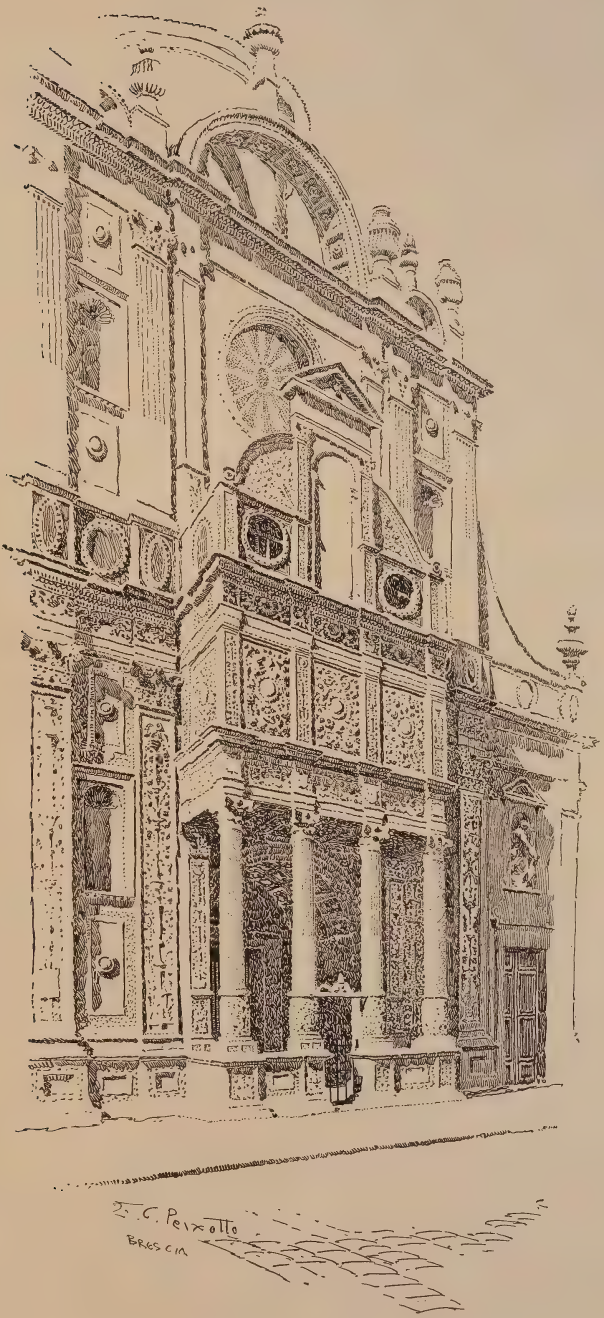


Painting by Ernest C. Peixotto.
Panel for a Reception Room at 9 East 76th St., New York.

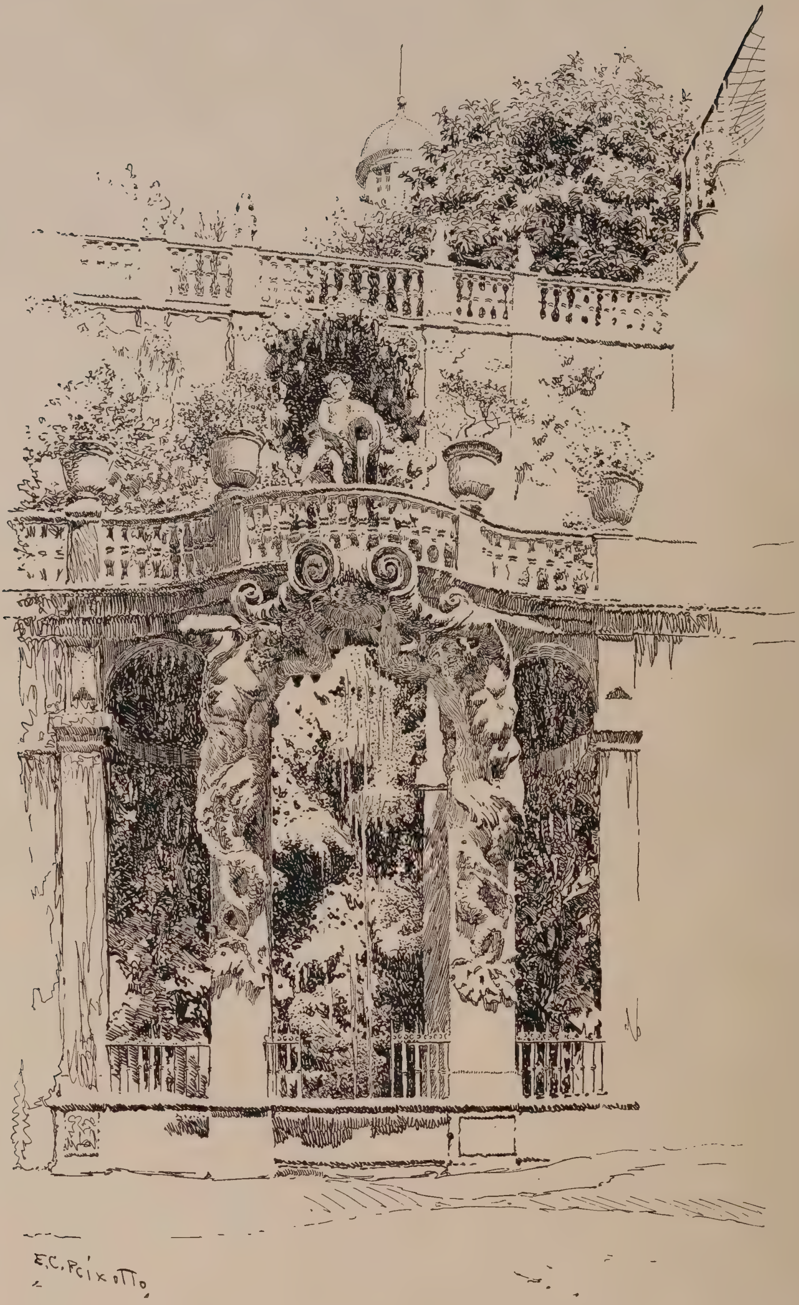


Courtesy of Charles Scribner's Sons.

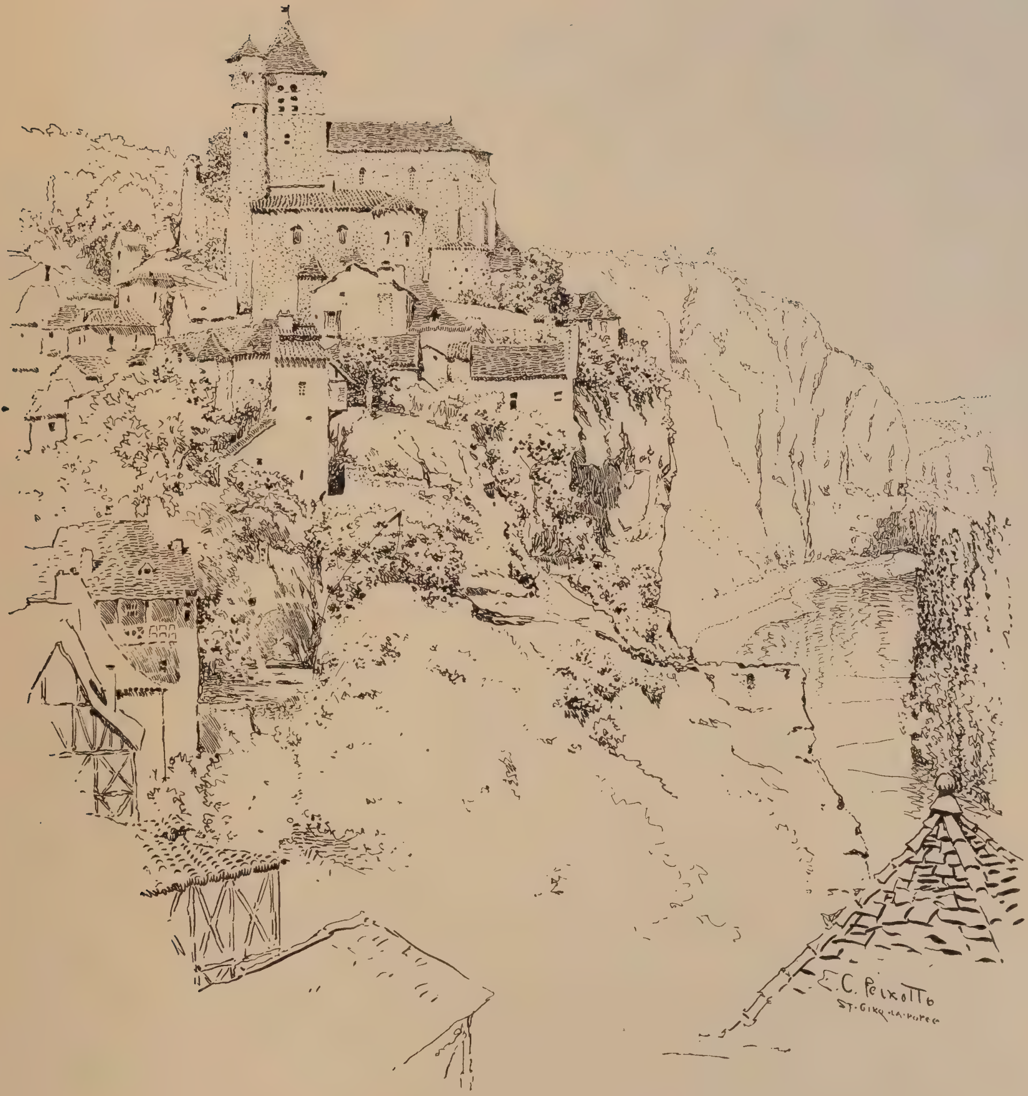
Pen and Ink Sketch by Ernest C. Peixotto.
Rocamodour from the River Alzou.



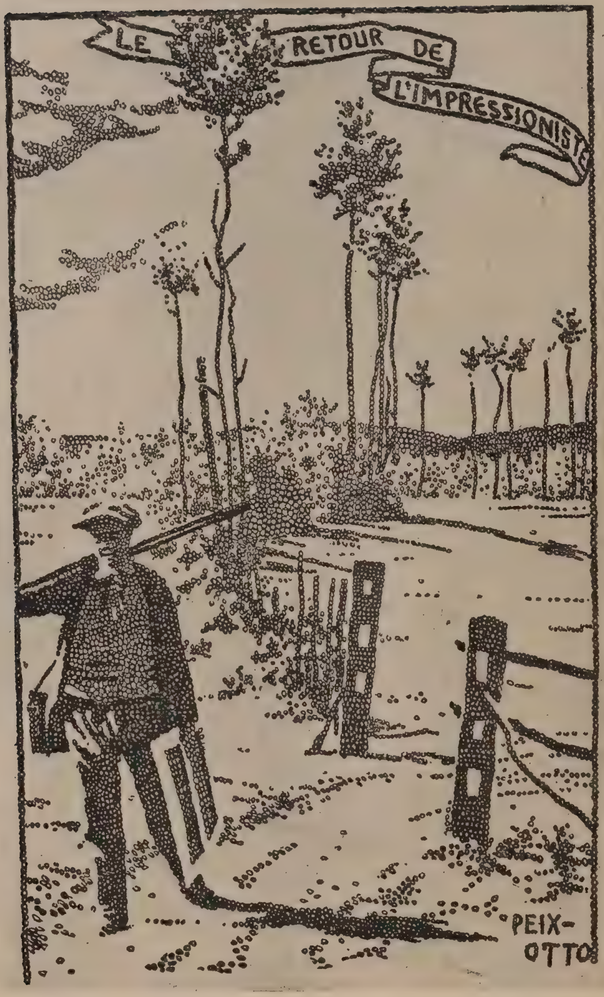
Pen and Ink Sketch by Ernest C. Peixotto.
Chiesa dei Miracoli—Brescia.
Courtesy of Scribner's Magazine.



Pen and Ink Sketch by Ernest C. Peixotto.
Fountain in Palazzo Podestor, Genoa.
Courtesy of Scribner's Magazine.



Pen and Ink Sketch by Ernest C. Peixotto.
St. Cirq-la-Popie in Southern France.
Courtesy of Scribner's Magazine



Drawing by Ernest C. Peixotto, from "The Lark."

work. He's on his way to do great things. His compositions are excellent! The technique is as dainty and delicate as bird tracks in fresh snow!"

During several years many were the students who noted his work and bought the magazines and books containing reproductions of his drawings. Progress continued to mastery. Atmosphere, a great sense of space and picturesquesness and a wonderful representation of peopled streets—of light and air—developed in his pen-and-ink, and also in his wash sketches to the limits of his media. Then he took up color (which he had studied from the first) and his sketches were less and less frequently seen.

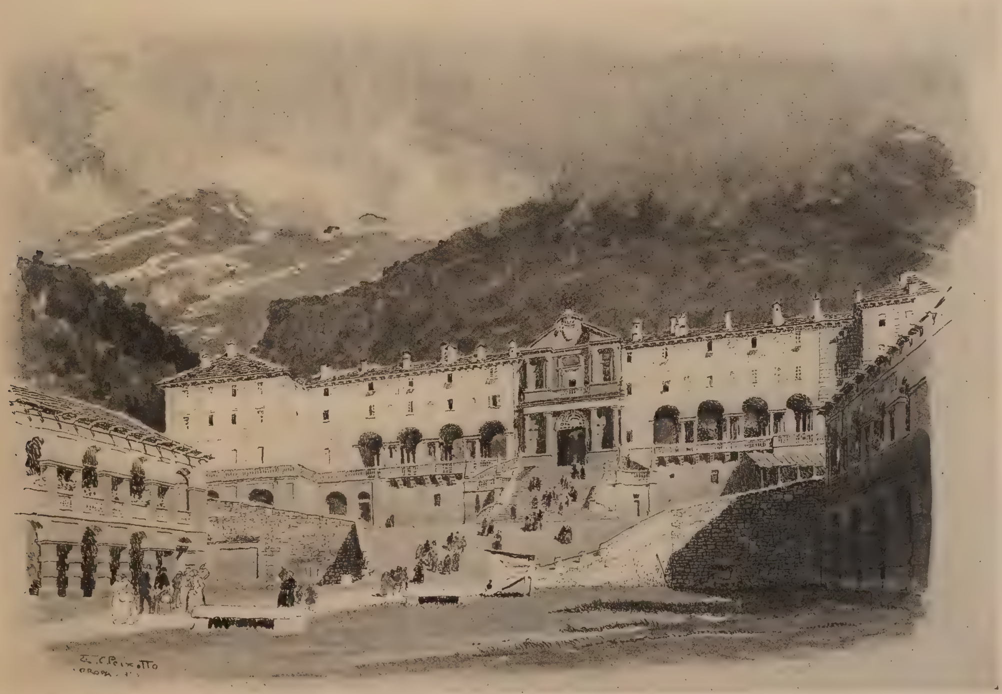
A short time ago while looking over a book of his drawings of the old colonial architecture of Philadelphia I asked my friend to whom the book belongs: "What has become of Peixotto?" "Oh," he said, "he's been dead the past five or six years." Not quite satisfied on that point I looked up his name in the telephone book. It was there. I went to his studio; but when I told him the report of his death he assured me it was "not true." There were plenty of evidences, besides himself, that it was not. His work is decidedly alive—he had only buried himself in study and work and disguised himself by using his full given name instead of his initials. He had simply gone on from sketching to painting; from illustration to mural decoration. In his works of decoration the broad medium of oil painting affords scope for his imagination to play with color as well as values and composition. The striking qualities of life, light and air are in the paintings as they were in the earlier drawings; and the same masterly draftsmanship—eliminating the superfluous but retaining the effect of all essential detail. The fine dramatic poise of the architecture in his decorative compositions, the imaginative quality and excellent sense of scale are the same; but carried further—for his color is good; and that adds much.

Now he is using the sketches, which he made in the early part of his career, as preliminary studies for the bases of his decorative paintings.

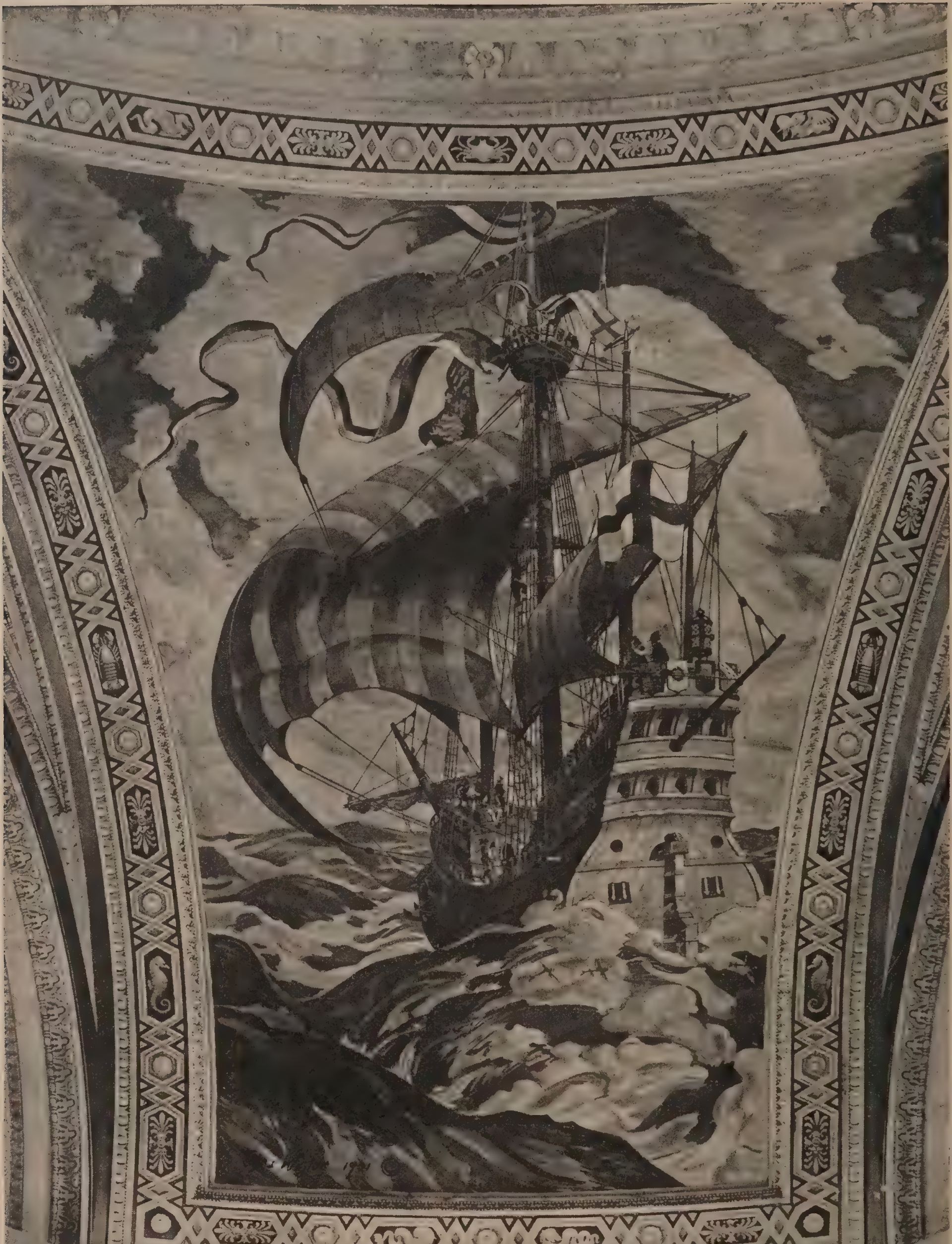
It is worthy of note, here, that all of his sketches and drawings made during his travels in Spain were purchased by Mr. Huntington for the Hispanic Museum in New York City.

During the War he was one of the official government artists with the Army, and our portrait is from a sketch from life made and presented to him by his friend Albert Sterner during that time.

He is now Director of Mural Painting of the Beaux-Arts Institute of Design, and Chairman of the Department of Painting and Sculpture of the Fontainebleau School of Fine Arts at the Palace of Fontainebleau, France, under the patronage of the French Government.



Drawing in Wash and Ink by Ernest C. Peixotto. Oropa in the Alps.



Ezra Winter, Painter.
Cabot's Boat, Decoration in the Cunard Building Great Hall. Size of Painting, twenty feet high, twenty feet at top.

THE GALLEON IN DECORATION

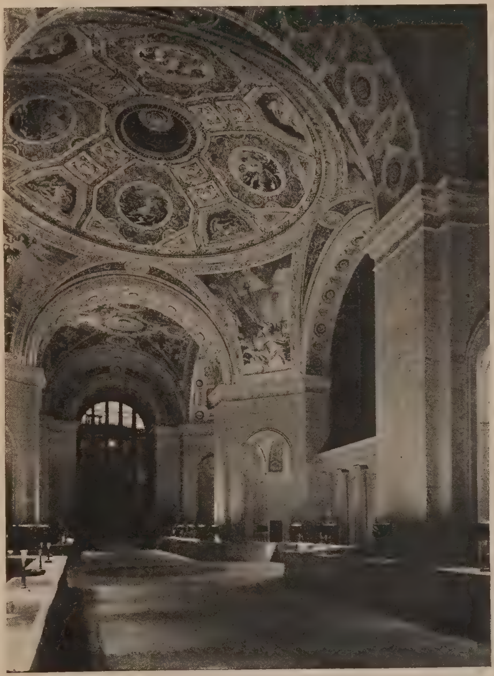
BY FRANCIS S. SWALES

WHO that picks up such a book as Howard Pyle's "Book of Pirates" or "Treasure Island" is not at once fascinated by the call of the sea? It is mainly to be heard in the flapping of the huge sails and big pennants; the wash of the great waves about the high, safe-from-the-sea hulls; the suggestion of the great views to be had of "the rolling deep" from the skyscraper-like, storied, stern cabins with their architectural allurements of baroque carvings, gilding, corbelled decks and ornamental lanterns of the galleons—the great ships of which the sails, displacing the oars of the earlier galleys as a principal means of propulsion, made it possible to cross the Atlantic and travel round the world. For a good picture of a fine ship—and in the decorative sense there has never been anything finer than the galleon—provides music and sound waves, as well as the words, of the song of the sea—the lure to travel and adventure.

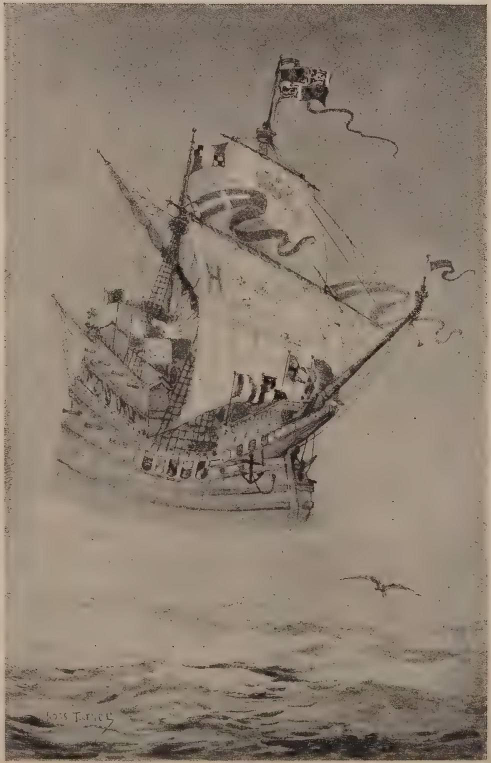
"1916" was a period of submarine warfare but who, that might have owned that ship that Aylward drew for the cover of the Ladies' Home Journal—wouldn't have taken her out beyond "the three mile limit" though the sea were as full of hostile submarines as it is of fish? Who that walks into the new Cunard Building in New York, and sees Ezra Winter's decoration, "The Voyage of Columbus" does not wish to immediately buy a ticket and "go somewhere?" It wouldn't matter much where—the disappointment would come after getting aboard. A "liner," with a cabin like a room in a New York or Berlin hotel, "steady as a rock," driven by a screw, no sails—general disillusionment—no place for a fellow who has read Marryatt, Stevenson, Kipling and Conrad or ever sailed, in even so much as a "twenty-five-foot waterline," lugger. But to go back to pictures there is one by Ross Turner of a chunky old galleon: "The Wind of Victory in Her Burly Sails!" That is enough to make one wish to join the "bootleggers" and defy "the whole darned dry Navy." But for the thoroughly subdued American, who envies the participants in Teapot Domes and Airplane grabs and abides by the Volstead act—if capable of understanding that a "picture" can be anything else than a "movie"—and who would get seasick watching a boat at sea "on the screen"—well, the best he can do is, still, look at a picture of a galleon! Consider that the kind of men who started these colonies, which later became these United States, came over in ships something like these—they are the very beginning of our history—and distance in that matter surely lends enchantment! To have about us reminders of a good beginning is an object in itself. But a thing also so very decorative, whether in picture or model, is difficult to find.

Whether the galleon is shown going or coming, or lying at the dock—in movement or at rest and by whatever means it is shown it is invariably decorative. Perhaps that much may be said of any ship—even our modern liners, of the most inferior sort, are decorative. But there is a difference in degree. As with most things modern and up-to-date one soon tires of seeing an *Olympia,* for instance—or a picture of her, however good. But as to the picturesque and truculent ships of the fifteenth and early sixteenth centuries it may be safely said, we shall not tire of them. The earlier types—before the time of The Great Harry, when "the biggest" ship began to become an obsession of ship builders—belong to a time of change and development which marks the mind of the designer and builder at work. A period when artist and constructor thought and wrought new things—when the naval architect was like the architect of buildings—a progressive contriver of better things, practical and beautiful. The earlier hulls seem to have been similar to a modern canal barge, but with high bows and stern and a strong "lean-home." Above the main deck, fore and aft constructions of one or more stories were built to contain cabins and the "bridge." Authentic information, even as to pic-

(*Continued on Page* 80)

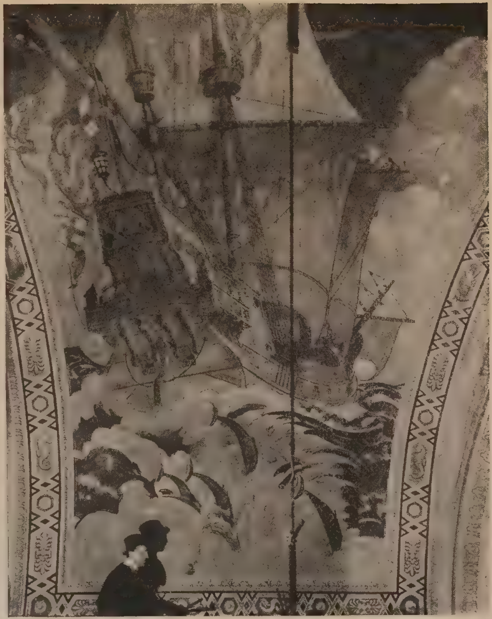


Dome of the Cunard Building, New York City, showing Ship Designs in Pendentives. Mural Decorations by Ezra Winter. Benjamin Wistar Morris, Architect.

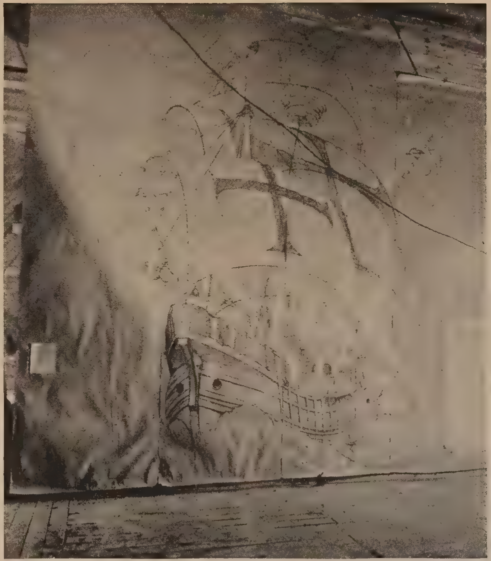


Drawing by Ross Turner "The Wind of Victory in Her Burly Sails."

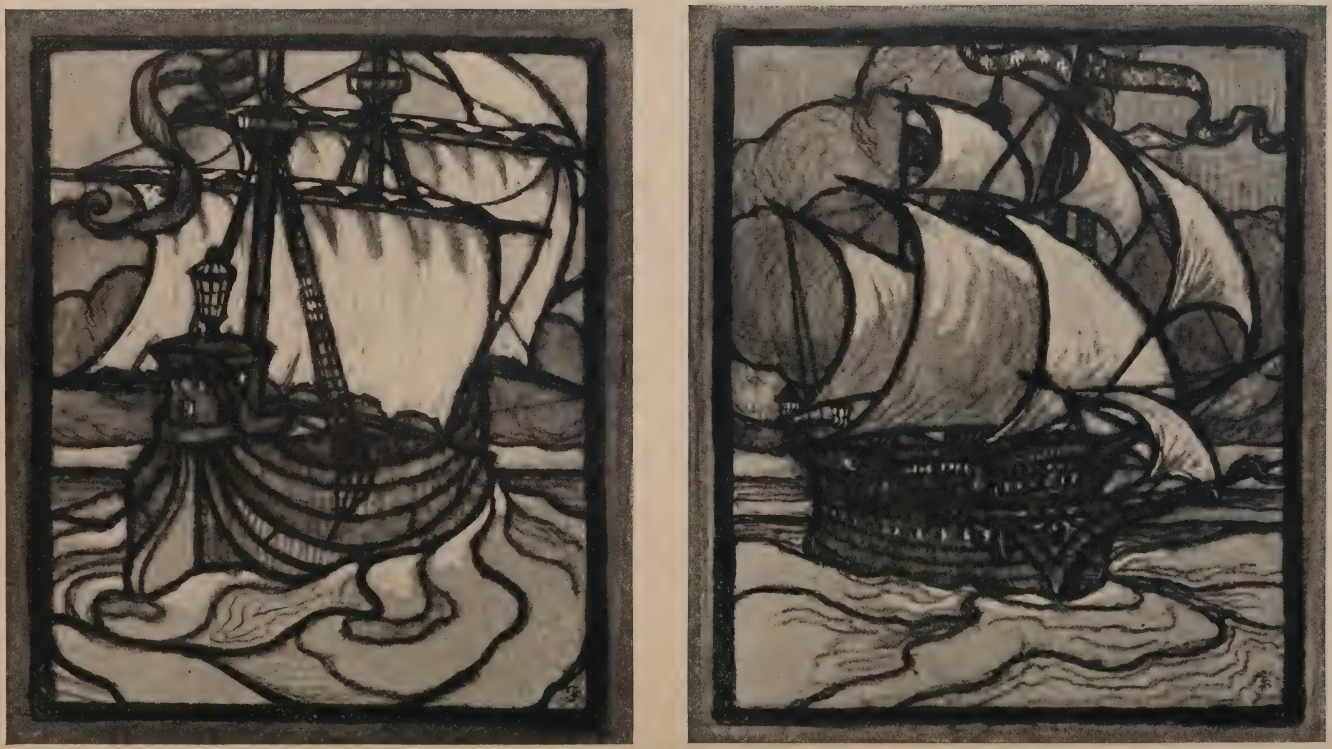
A Cover Design by W. J. Aylward, for "The Ladies' Home Journal."



One of the Ship Decorations in the Cunard Building in Process of Painting.



One of the Ship Decorations for the Cunard Building Drawn in Outline on the Canvas in the Painter's Studio.



Cartoons for Stained Glass by Francis S. Swales.

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THE AMERICAN ACADEMY IN ROME

FROM a letter recently received by C. Grant LaFarge, Secretary of the American Academy in Rome, from Gorham P. Stevens, Director, we quote the following items:

"The Summer School came to an end on August 16th. There were thirty-nine registrations, as against five for last year. Nineteen took the examination on the 15th, and received certificates stating that they had faithfully fulfilled the requirements and were recommended for graduate credit of six hours. The states of the Union represented by the enrolment numbered nineteen. The students so appreciated the benefits derived from the course that at their departure they presented the Library with one thousand lire for the purchase of such books as Professor Showerman should recommend.

"Professor Lamond has gone to America to discuss with the members of the jury on musical composition the method of appointing Fellows in music. He hopes to remain in America until the October meeting of Board of Trustees.

"Stevens, Fellow in sculpture, is at work upon a lay-out for Belleaux Woods in France; he has designed a colossal figure of America for this site. Flogel, Fellow in painting, is taking a chapel in the largest of the American cemeteries in France for his collaborative problem for next year (there are thirteen thousand Americans buried in this cemetery).

"The cast collection is assuming importance. Most of the reliefs of the famous arch at Benevento are now in place.

"Professor Elizabeth Haight of Vassar has been in town and has shown interest in a new hostel for women students. She is going to see if she can find someone to donate the necessary money.

"The Thrasher-Ward Memorial is to be in place the 20th of this month.

"Prof. Edward G. Lawson, former Fellow in landscape architecture, has passed through Rome. He had charge of a body of a group of landscape architects, a portion of a party of 80, including architects, painters and sculptors. The Institute of International Education organized this European tour. We secured permissions for the party to see many Italian villas, and entertainmened the members one afternoon at the Academy."

HARRY K. BIEG.

HARRY K. BIEG, winner of the Seventeenth Paris Prize of the Society of Beaux-Arts Architects, was born March 19, 1900 and received the usual preliminary education in the public schools of Chicago.

After graduating from Lane Technical High School in 1918 he entered the Armour Insitute of Technology, Chicago for the study of Architecture. In his sophomore year he changed to the civil engineering course but the ever strong appeal of the study of Architecture soon brought him back, and he graduated in 1922 with a B. S. degree in architecture. His work in the Beaux-Arts Institute of design has been notable and he is the holder of seven medals. The summer following his junior year at Armour was spent in travel abroad, touring the countries of Italy, France, Germany and Switzerland. Mr. Bieg received sufficient values during his senior year at college to enable him to compete for the 2nd Preliminary of the 16th Paris Prize in which he placed successfully. In the final competitions he placed second and first medal. More determined than before he again entered the 2nd Preliminary of the 17th Paris Prize, was successfully placed and won in the finals.

Since graduating from Armour Mr. Bieg has worked in the office of Lowe & Bollenbacher and for the past year has been in the employ of S. Schmidt, Garden and Martin, Chicago.

The winner was successful in the recent State board examination and is now a registered Architect of the State of Illinois.

Mr. Bieg feels that he owes much to Mr. Edmund S. Campbell under whom he studied.

CLUB ACTIVITIES

IN RESPONSE to our request published in last month's issue we have received items describing the organization and growth of several architectural clubs and these are published in this issue. We have also received copies of the constitution and by-laws of several clubs, some of which are published in this issue, the others being held for future publication. We believe that the publication of such material on club organization is of the greatest value to all interested in the organization and conduct of architectural clubs and we wish to have contributions from clubs in all parts of the country. Let us hear from your club.

ARCHITECTURAL TENNIS TOURNAMENT FIRST ANNUAL TROPHY DINNER

THE First Annual Trophy Dinner of the Architectural Tennis Tournament, New York City, was held on Tuesday evening, September 16.

Messrs. William A. Delano, Harvey W. Corbett, Olaf Anderson, and W. J. Walsh were the guests of honor.

Mr. Corbett was the first victim of the post-prandial ceremonies, and spoke in praise of the tennis activity and of athletics in general, as aids to better health and wider acquaintance and therefore to higher efficiency. He then brought up the matter of an architectural center for the metropolitan district and seemed of the opinion that such a club was both needed and quite possible of attainment—suggesting, by the way, a promotion method which will be used to that end. In closing his address, Mr. Corbett sprung his own surprise by offering to present a singles trophy for men over fifty years of age and to enter the tennis tournament himself next year. In later bulletins there will be further details concerning the Harvey W. Corbett Trophy.

Mr. Delano was then called upon and, after a few words expressing his pleasure at the success of the tournament and the Syosset Outing, proceeded to award the 1924 tournament prizes:

Men's Singles

Everard Sheppard (York & Sawyer)
William Adams Delano Trophy for 1924, Gold Medal for Winner
George B. Kayser (Schultze & Weaver)
Gold-filled Medal for Finalist
H. W. Lawson (Dwight P. Robinson)
and
N. W. McBurney (Peabody, Wilson & Brown)
Silver Medals for Semi-Finalists
C. E. Arnold (American Architect)
Bronze Medals for Qualifying Round
A. R. Stanley (Dodge Reports)
A. M. Koch (Penrose V. Stout)
and
J. H. D. Williams (Delano & Aldrich)

Men's Doubles

G. B. Kayser and Bert Deer (Schultze & Weaver)
Silver Cups for Winners
E. Sheppard and F. H. Crossley (York & Sawyer)
Silver Medals for Finalists

The Chairman then gave a brief resumé of the 1924 tennis season, naming those whose efforts had helped particularly toward the success of the tournament. He then presented, on behalf of the organization, a gold medal to Mr. Delano, tennis patron, a silver medal to Donald M. Campbell, official Shylock, and a bronze medal to A. E. Watson, designer of the same, for especially valuable services during the past season.

Mr. Campbell next favored with a Treasurer's Report for 1924, and the less said the better. This was not his fault, however, as many of his victims will cheerfully attest. In conclusion, Mr. Campbell presented to Mr. Olaf Anderson of Neumann & Even, for modelling work on the medal, three gold medals of rather conventional design and somewhat commercial significance.

Followed then the reading of a tentative constitution for the proposed general architectural club and, while this constitution had never even been adopted, much less amended, still it seemed to be received with a certain measure of suspicion, characteristic perhaps of the times.

The election of a Chairman to take office January 1, 1925, resulted in the unanimous choice of George A. Flanagan (Donn Barber). This selection was in line with the belief that a yearly change of administration will help to attract and utilize new talent and new ideas, and thus prove in the long run most beneficial to the organization.

Plans for the 1925 tennis season are already under way and we shall be glad to have the names and addresses of any new players who wish to compete in next summer's tournament. Present plans contemplate Men's Singles, Men's Doubles, Veteran's Singles, probably Mixed Doubles, and possibly Women's Singles events, depending upon the interest shown.

A. F. Darrin, 949 Park Place, Brooklyn, N. Y.

JAMES E. GAMBARO

JAMES E. GAMBARO, the winner of one of the Princeton Scholarships, was born in New York November 17th, 1901. The winning of this scholarship was a result of long years of study and application to his work, and his selection is considered by his friends as well merited. He began his office experience with two years under Mr. L. V. V. Sweezy, A. I. A., whose encouragement was a large factor in helping him get started. For the past five years he has been in the office of Alexander Mackintosh, F. A. I. A., R. I. B. A., Mr. Mackintosh as winner of the Sir William Tites Prize of the Royal Institute of British Architects, as well as a number of other honors in the Royal Academy, London, was in a position to advise and assist Mr. Gambaro in many ways, and Mr. Gambaro feels that a great deal of the credit for this success is due him.

For the past three years "Gam" has been a member of the Atelier Hirons, serving as Secretary and Treasurer for the past year and a half. It is in the Atelier that his true self is shown, his ability at extracting money from stones and his genius in making life interesting for those around him has been very marked. Besides the regular Class A Beaux Arts work he has niggered on two Paris prizes. In the October 1923 number of Architecure, he had published an article and measured drawings of Colonnade Row. He is at present measuring St. Marks in the Bowery.

In his academic training Mr. Gambaro feels greatly indebted to the inspiring leadership of Mr. Hirons. While his membership in the Atelier has done a great deal to raise its morale, he feels he has benefited also from association with this dignified and select bunch of pirates, especially Massier Simonson, R. Banks Thomas and Rudolph De Ghetto, Paris Prize Logeists in 1923, and Andrew F. Euston, Logeist in 1924. We trust there will be no great conflagration among the buildings at Princeton this year—but if there is we will know whom to blame.

THE ARCHITECTURAL AND ALLIED ARTS EXPOSITION

THE first formal announcement of the Architectural and Allied Arts Exposition, which will be held in Grand Central Palace, New York, from April 20th to May 2nd, under the auspices of the American Institute of Architects and the Architectural League of New York has been made by D. Everett Waid, President of the American Institute of Architects.

An advance announcement of the Exposition was published in Pencil Points some months ago, but since that time the work of preparation has been actively pushed and much more can now be said about this most interesting event. It is expected to be the largest international exposition ever held in the interests of architecture and allied arts and trades.

The international exposition will show almost everything that goes into a home or office building from the cellar to the chimney. It is believed that it will attract the largest number of home seekers, painters, architects, sculptors, builders, contractors, and the general public that has ever attended any exhibition of architecture and the allied arts.

During the exposition the American Institute of Architects will hold its Fifty-eighth Annual Convention and the Architectural League of New York will hold its Fortieth Annual Exhibition in Grand Central Palace as a feature of the exposition. There will be a number of national and international congresses and conferences on architecture and allied arts.

Arrangements are already under way to secure foreign participation. Some of the leading foreign architectural associations will send highly selective exhibits and it is expected the exposition will give a good survey of architectural work abroad. Among exhibits may be some made by European royalty. Foreign cities active in city planning including cities in the French restored districts, and Sweden, Norway and others will be represented.

The exposition is expected to bring into New York leading architects from every state in the Union; every one of the fifty-five chapters of the American Institute will be represented by delegates. It is expected that New York will see the largest number of architects from America and abroad of any period in its history.

The awards of the Architectural League, and of the Institute will be made at the time of the exhibition.

Among organizations represented on the advisory committee of the forthcoming exposition are the National Association of Real Estate Boards, the Decorator's Club, the Society of Interior Decorators, the Regional Planning Association, the American Society of Landscape Architects, American Society of Civil Engineers, the Society of Beaux Arts Architects, the American Society for Municipal Improvement, and many others.

The exhibition is under the direction of Charles H. Green, 105 West 40th Street, former director of Manufactures and Varied Industries at the Panama Pacific and other world exhibitions.

Mr. Green thus outlined the forthcoming exposition:

"The Architectural and Allied Arts Exposition will represent the collection of the archievements of a great profession together with objects which may be classified as art in industry, including materials that enter into the construction and embellishment of public buildings and private homes. Such an exposition might well be called an encyclopaedia of society as applied to art, for it will represent in highly specified array society's words and works, and will provide in complete detail 'a living picture of industrial art at which mankind has arrived' and will actually provide a new starting point from which men may direct future exertions. It will present for the inspection of the public an assembly of the best which the world has to show in architecture and industrial art and which is very important; it will offer these achievements of society, these trophies of civilization in highly selected, accurately classified and effectively illustrated array. It offers illustrations covering the full field of artistic performance from the production of designs of public and private buildings to a presentation of the rarest and most delightful creations of the brain and hands of man, in what might be classified as the fine arts of civilization."

D. Everett Waid, President of the American Institute of Architects and Chairman of the General Committee of the Exposition is one of those most actively responsible for bringing to New York not only the largest architectural exposition in the world but the first A. I. A. convention that has been held here in many years. The National City Planning Conference, the American City Planning Institute, the International Garden Cities and Towns Planning Federation are among scheduled meetings at the time of the exposition.

The directors of the exposition are: Manager, Charles H. Green; Director of Exhibits Walter T. Sweatt; Director of Decorations, Howard Greenley; D. Everett Waid, Chairman of the General Committee; Harvey Wiley Corbett, Chairman of the Exhibition Committee; Robert W. de Forest, Chairman of the Advisory Committee. Among the patrons are: Frank A. Munsey, Adolph S. Ochs, Ralph Pulitzer, Melville E. Stone, Charles M. Schwab, Otto H. Kahn, Nicholas Murray Butler, Irving T. Bush, Henry W. Taft, Haley Fiske, Charles Evan Hughes, John F. Hylan, V. Everit Macy, Charles Mitchell, Paul D. Cravath, Hon. John W. Davis, Paul Dana, R. T. Haines Halsey, Henry S. Pritchett, Albert Shaw, Rollo Ogden, and many others.

As a whole the exhibition will comprise exhibits of everything that goes into the construction, furnishing, heating and lighting of public buildings and private homes. Four floors, with a total area of over 200,000 square feet will be filled with highly selective exhibits subject to the approval of a committee. There will be no repetition. Each will be the best of its own field of endeavor. Stone, marbles, stuccos, fine woods, mantels, furniture, decorative objects of art, paints, painted finishes, wall coverings, tile and flooring, plumbing fixtures, kitchen and pantry equipment, upholstered fabric and other necessities entering in modern life will be shown. Structural features such as columns, beams, steel work, tubing, casings and other materials used in building construction will find a place in a carefully planned educational display. The exhibition will follow through the highest standards set by the American Institute of Architects and the Architectural League of New York. It will be correspondingly instructive to the building trades, and the technical professions, tending to develop a better understanding and an opportunnity to make a survey of the latest and most up-to-date appliances which the manufacturers of America have created and placed at the disposal of the building industry.

PRESENT-DAY ARCHITECTURE

AMERICA is working out its own notions of Architecture despite the fondness of Americans to identify our effort in this field with that of the ancients, Prof. William A. Boring asserts in his annual report as Director of the School of Architecture of Columbia University to President Nicholas Murray Butler.

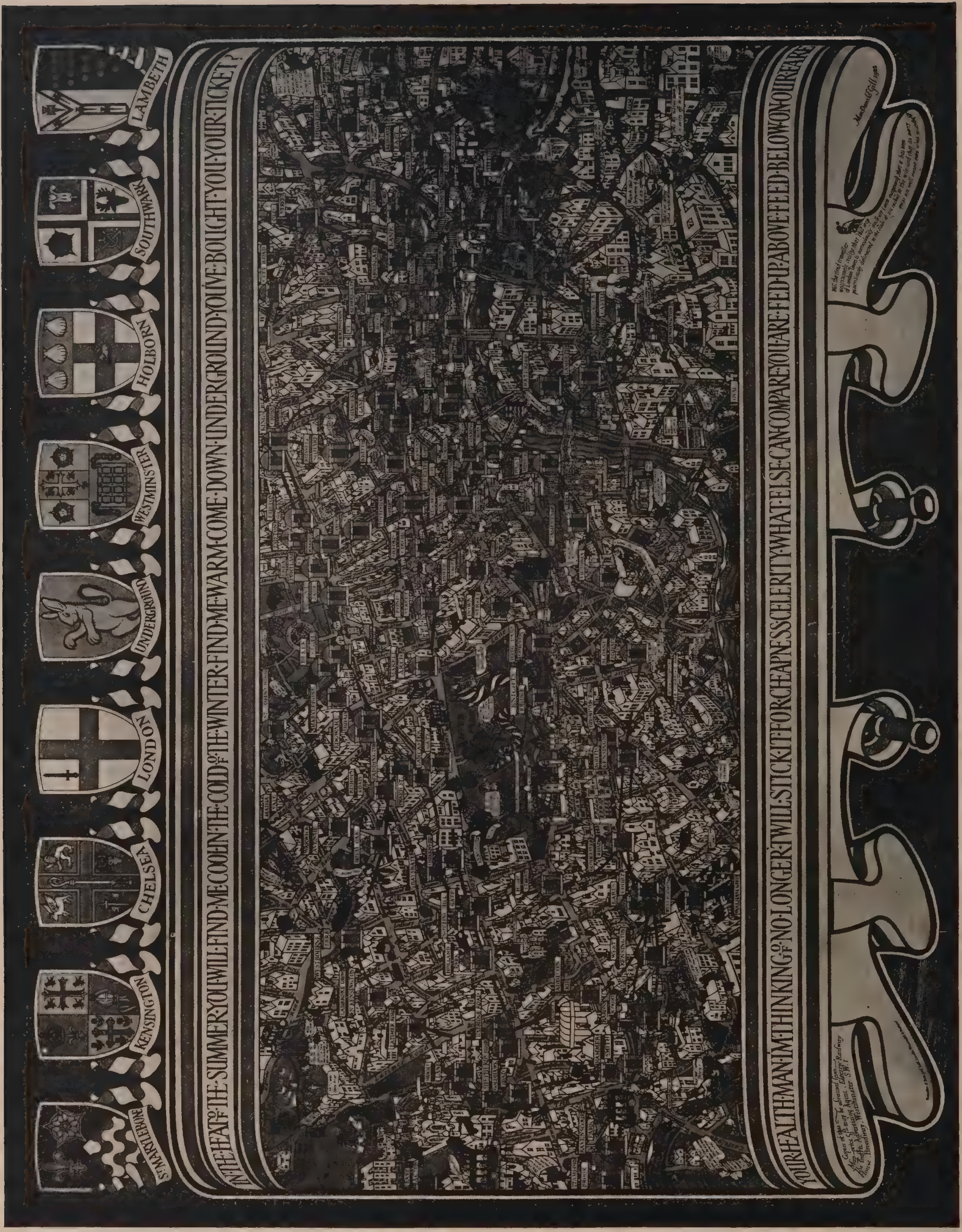
"It is now fashionable in America to liken our tendencies and our probable decline to those of Rome, citing as proof the resemblance of American public buildings to those of Rome," says Prof. Boring. "While our stadiums and places of public assembly are not unlike those of the ancients, the majority of our buildings are of a new system of construction.

"This requires us in our teaching to guide students to personal and independent thought in design, and to acquaint them with the achievement of the past and those truths of beauty which consciously or unconsciously control all artists.

"Training in architecture might well be defined as leading from instruction to reproductive imagination, from this to productive imagination and finally to vision, that divine sense with which genius is endowed and which we endeavor to cultivate in the lesser mortals who have to work for it.

"Imagination produces the first idea. Vision is the power to give this idea definition. The nebulous idea, without form and void, must be followed by a successive process of study to crystallize, round out and perfect it in mass, line, proportion and color in order that it may become architecture.

"Vision is that Godlike quality of the Greeks which envisaged beauty, clearly defined, to the minutest shadow of a line and the most delicate perception of proportion. To few it is given to see things right without infinite pains; our problem in the School of Architecture is to stimulate the imagination and to train the vision by bringing beautiful form to the ideas which are the children of the students' imagination."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Map of London Drawn by MacDonald Gill in a Quaint Decorative Manner. Lithographed in Colors. Issued by the Traffic Advertising Manager, Electric Railway House, Broadway, Westminster, S. W. I. The following humorous note appears in the lower right hand corner: "Will the tired traveller wearisomely realize that this map of London Town is meticulously accurate (with exceptions), that it has been punctiliously delineated to the scale of six inches to the mile and that its merry quips are well meant even when unintelligible."

PERSONALS

G. Whitecross Ritchie has passed his examination and been granted a certificate to practice architecture in the State of California and is now in his new offices at 2532 West Seventh Street, Los Angeles, Calif.

George P. Turner, Architect, has opened an office at 1420 American Trust Bldg., Birmingham, Ala.

Jonathan Ring, Architect, has opened an office at 1401 Hibernian Building, Los Angeles, Calif.

Leonard L. Broida and Maurice G. Uslan have opened an office for the practice of architecture at 701 Century Bldg., Pittsburgh, Pa.

Bertram N. Marcus has opened an office for the practice of architecture at 145 West 57th Street, New York.

Stern & Peyser, Architects, have removed their offices to 12 East 1st Street, Mt. Vernon, N. Y.

W. F. Frederick Co., Architects, have opened an office at the Continental Trust Building, Fourteenth and H Streets N. W., Washington, D. C.

Thomas R. Martin and Clare C. Hosmer, formerly Director of the Chicago Architectural Exhibition, have opened offices for the practice of architecture at Sarasota and Fort Myers, Florida, under the firm name of Martin-Hosmer Studios, Inc.

ARCHITECTURAL SOCIETY OF SYRACUSE UNIVERSITY

AT THE first meeting of the year a committee of seniors and a faculty member are named to instruct freshmen in their duties toward the department and to other students.

During the winter a social event is held, to which the entire department, including the faculty members and their wives are invited. Last year this affair took the form of a Christmas party an account of which appeared in the February Pencil Points. Each year a local sketch competition for underclassmen is held, under the auspices of the society, a prize being awarded by one of our members, in the name of the Society to the underclassman who has made the greatest number of points in sketches during the year. This award is made at our annual banquet, which is held early in May. Underclassmen, society members, alumni, faculty and the city architects and draftsmen attend. At this banquet we have speakers of national and international reputation, such as Harvey Corbett and Dwight James Baum, Syracuse '09.

Our key is a gold Greek-Doric cap; our pledge, worn for two weeks before initiation, is 1″ diam. 10″ long, a pencil, suspended by a bright orange ribbon about the neck of the pledgee. Our society, in various forms has existed since 1902.

THE ARCHITECTURAL BOWLING LEAGUE OF NEW YORK AND THE PROPOSED ARCHITECTURAL CLUB

THE Architectural Bowling League of New York held its first regular meeting since the summer vacations, at headquarters in the Hotel Shelton, Monday evening, September 8th. The various committees which had been working during the summer made their reports at that time.

Mr. R. B. Pierce, a member of the Detroit Architectural Bowling League, of which he was the first president, was a guest of honor. Mr. Pierce gave a very interesting talk on the start of the Detroit League and events leading up to the present successful organization. He also told us of a seven story recreation building in Detroit which holds among other things, eighty-eight splendid bowling alleys. It would certainly seem to the writer that such a proposition would make a very sound investment for a group of New York promoters.

At the close of the meeting an informal talk was engaged in by the directors regarding the proposed architectural Club for New York. After listening to some very splendid discussions on the subject it was agreed unanimously that the club idea was undoubtedly a very worthy undertaking and if carried out along sane, practical lines should become a very successful organization in future years.

Committees will go to work on a Constitution and By-laws while the representatives will continue to get the various views of the men in their offices. If this club is to be dedicated to the service of the men in the profession its regulations must reflect the ideas of the majority of these men, otherwise it will fail of the purpose for which it is planned.

Our baseball team comprising men from various architects' offices has been booking games with other amateur teams, among which is the famous team of the Welfare League at Sing Sing Prison. This game is scheduled for Saturday afternoon, October 18th, at two o'clock, and special arrangements will be made at Ossining to entertain the visitors with the prison band and other novel features. Many are going by automobile but it would also be a good idea for those going by train to meet at Grand Central and go together. For further particulars get in touch with Mr. Scheffer, care James G. Rogers, No. 367 Lexington Ave. The authorities at Ossining must know at least one week ahead the approximate number of visitors expected.

A very interesting game was played off with the Westchester Athletics, Saturday, September 20th, and it is a great credit to our newly organized team that we outplayed them 7 to 4 in spite of the fact that our opponents had been playing all season.

Bowling for the season 1924-5 started Monday evening, September 29th, at the Shelton, and will continue through the winter until May.

Announcements of dinners, dances, etc., will be made at an early date.

Norman T. Valentine, *Secretary*.

THE INTERNATIONAL CONGRESS ON ARCHITECTURAL EDUCATION

By W. S. Purchon, M.A., A.R.I.B.A., Head of the Department of Architecture & Civic Design in the Technical College, Cardiff. Member of the R. I. B. A. Board of Architectural Education, and member of the Executive Committee of the Congress.

IT SHOULD be said at once that The International Congress on Architectural Education, held in London during the last week in July, was a remarkable success. The Congress was organized by the Royal Institute of British Architects, which appointed a very strong executive committee, and the success of the conference was undoubtedly due in the main to the untiring efforts of Mr. Maurice E. Webb, Chairman of the Executive Committee, and Mr. E. J. Haynes, Secretary of the Board of Architectural Education of the R. I. B. A. The efforts of these gentlemen and of the members of the various committees would have been unavailing, however, had it not been for the zeal with which the leading schools of architecture and the leading architects in practically every civilized country in the world backed up their efforts. And of these many countries, none supported this great movement with greater enthusiasm than the United States of America.

The proceedings opened with a reception at the Galleries of the Royal Institute of British Architects in Conduit Street, London, on the evening of Monday, July 28th, when the President (Mr. J. A. Gotch) and Council of the R. I. B. A. welcomed a large number of members of the Congress.

On the following three mornings papers were read on the Past, Present and Future of Architectural Education in America, France, Italy and England; the three papers on the American work being read by Professor Wm. A. Boring (Columbia University), Professor William Emerson (Massachusetts Institute of Technology), and Mr. F. H. Bosworth, Jr. (Cornell University), respectively. The chairman for the first morning was the Rt. Hon. the Earl of Crawford and Balcarres, Hon. Fellow R. I. B. A.; for the second morning Sir Reginald Blomfield, R. A., past President, R. I. B. A., and on the third morning Mr. Cass Gilbert, Past President of the American Institute of Architects.

Exhibitions were held in the Galleries of the Royal Institute of British Architects, at Devonshire House, and at Grosvenor House. At the Royal Institute Galleries the Exhibition consisted of the work of students at the American Academy in Rome and at the British and French Schools at Rome, and here also was a fine exhibit of rare architectural books and architects' sketch books. At Devonshire House there was an exhibition of the work of the Schools of Architecture in Great Britain and the British Dominions, prominent amongst which were the works submitted by the students at the University of Liverpool; the Architectural Association, London; University College, London; and the University of Manchester. A selection of the work of R. I. B. A. Prize Winners was also on view at Devonshire House; some entries submitted in the early days of these prizes were particularly interesting, showing as they did the extraordinary strides which have been made during recent years in architectural education.

At Grosvenor House, by kind permission of His Grace the Duke of Westminster, an exhibition was held of the work of Schools of Architecture abroad, including exhibits from America, France, Italy, Holland, Denmark, Norway, Sweden, Spain, Russia, Portugal, Austria and Hungary.

While some of us were undoubtedly attracted by the freshness and vigor of the Dutch section, and notwithstanding the strong claims of the French work, it was quite clear that the principal interest centered in the American section, which included work from Harvard University; University of Illinois; the Carnegie Institute of Technology; Cornell University; Washington University; Massachusetts Institute of Technology; University of Minnesota; Georgia School of Technology; University of Pennslyvania; University of Michigan; The School of Design, Rhode Island; Yale University and Columbia University.

It may be said that the most brilliant drawing was one in the French section, and that, as has been suggested, there was something particularly refreshing—like a North Sea breeze—about the Dutch work. Yet for general excellence in draftsmanship, and—what is, of course, more important—in sheer design, the exhibits from the United States of America were well ahead of the rest.

There was a delightful lunch at the Architectural Association on Tuesday, after which the Architectural Association School and its work were inspected under the guidance of Mr. Goodhart-Rendel, Mr. Robert Atkinson, and Mr. Howard Robertson. A heavy storm prevented all but a few brave spirits (of whom the present writer was one) reaching University College, London; but those who ventured were well rewarded by the delightful manner in which Professor Richardson explained some of his teaching methods. A garden party had been arranged for that afternoon at Grosvenor House on the invitation of the Chairman (Mr. W. Curtis Green) and members of the R. I. B. A. Board of Architectural Education, but owing to the weather tea was served in the beautiful rooms of that house, with the exhibits from the various foreign schools grouped on the walls.

On Thursday afternoon the British teachers had a little meeting all to themselves—they should make this an annual event, for much good arises from these meetings with their free exchange of opinions.

For the benefit of our guests visits were arranged to the British Empire Exhibition at Wembly, and to Cambridge, Greenwich, St. Paul's, Westminster Abbey, The City Churches and the British Museum. Some of these visits took place on Friday and Saturday, but the main proceedings culminated in the Congress Banquet held in the King Edward VII Rooms at the Hotel Victoria on Thursday evening. This was indeed a memorable occasion, a wonderful gathering of the world's leading architects, which one would not have missed for much. Among those who spoke may be mentioned Mr. J. A. Gotch, President of the R. I. B. A., M. Charles Girault, Mr. Cass Gilbert, Mr. Ragner Ostberg (Sweden), Mr. Paul Waterhouse (who delighted us with one of his typically witty after-dinner speeches), Professor Stobell (Norway), Sir John Solmon (Australia), Professor McConnell (Toronto), Professor Annoni (Italy), Mr. Monasterio (Mexico), Mr. P. M. OFario (Spain), Professor Wm. Boring, Sir Reginald Blomfield, and the Rt. Hon. the Earl of Crawford and Balcarres.

It is too early to speak of the results of the Congress—they will emerge in due time when the papers and the resulting animated discussions have been published, read and digested, but it is at least clear that the Congress gave a great impetus to the movement towards better architectural education in this country. We realize that we, like you, have learned much from the French; doubtless you have helped us to benefit more from those lessons than we should have done unaided, for you have helped to show us how they can be applied to the solution of the problems of another land. We are glad to know that much of the work you sent to the Congress is to remain in England for one year to form part of a travelling exhibition.

We in this country certainly learned much at this Congress, particularly our smaller schools which also gained so much in the way of inspiration. But the main impressions with which one left the Congress were those of good-fellowship, the joy of meeting and seeing—perhaps even speaking to—men like Ostberg of Sweden, Slothouwer of Holland, Girault of France, and Cass Gilbert of your own country; the sharing of a real enthusiasm. and the feeling which the Congress gave that one was no longer merely a more or less solitary worker in a detached school, but one of a world-wide band, working steadily towards the realization of lofty ideals.

SAINT LOUIS ARCHITECTURAL CLUB

YOUR letter of July 29th has been received, and I am glad to tell you something of the history, aims and accomplishments of the St. Louis Architectural Club. I will not be able to send you five copies of our Constitution and By-Laws, as you request, for we have only two copies of it left. These printed copies were made eight or ten years ago, and I am attaching typewritten copy of the amendments which have been made to the Constitution in that time.

The St. Louis Architectural Club was founded in 1894, primarily as an organization of the younger men in the profession who wished to get together for study and exchange of ideas. Later on it took on more of a social nature, and in 1909 when it moved from rented quarters downtown out to the remodeled stable at 514 Culver Way, the membership was enlarged to include associate members as well as active. The Club now has a membership numbering two hundred and twenty-five, divided as follows:

Active, Senior Grade, 100—including architects, architectural draftsmen and superintendents residing in the City of Saint Louis or suburbs within a radius of twenty miles. These members pay annual dues amounting to $24.00, payable quarterly in advance.

Active, Junior Grade, 30—including students of architecture in the Club's Atelier as well as students in the day school of architecture at Washington University. These members pay annual dues amounting to $12.00, payable quarterly in advance.

Associate, 84—including men who are in a trade or connected with a manufacturing business related to the architectural profession. These men pay annual dues of $24.00, payable quarterly in advance.

Honorary Members include the Professors in the School of Architecture at Washington University, and architects who have rendered a distinct service to the Club. Honorary membership is for life, and such members pay no dues. There are seven men in this classification.

Non-Resident Active Members are men practicing architecture whose residence or place of business is more than twenty miles distant from St. Louis. Such members pay annual dues amounting to $3.00, payable in advance.

Only Active members can hold office and vote, but Associate members may serve on committees and may also serve on the Executive Board.

The officers of the Club are,—President, First Vice-President, Second Vice President, Secretary, and Treasurer. The business management of the Club is in the hands of the Executive Board, which consists of the officers mentioned, the two past Presidents, and two additional members elected from either the Active or Associate membership. There are three Trustees, one elected each year, their terms being for three years. Since the new building was bought and financed by a bond issue, three additional Trustees, known as Trustees of the Building Trust Fund, have been provided to serve until the indebtedness on the newly acquired building is wiped out.

Meetings of the Club are held on the first and third Thursdays in the month, from October 1st to June 1st, at 514 Culver Way, where there is a large hall with dining room and other rooms adjoining. The Atelier with its drafting room, class rooms and library is on the second floor of that building. When the first floor is not used for Club purposes, it is rented to outside organizations for dances and parties at $27.50 an evening. This rental is the Club's main source of income. The building at 3964 Washington Avenue, adjoining on the north the property at 514 Culver Way, is an old three-story brick residence. The first floor contains a Reception Hall, Lounge, Billiard Room, Dining Room, and Kitchen. Those rooms are being furnished this summer and will be open at all times to the Club members. The five large bedrooms on the second floor are rented to bachelor members of the Club, ten men occupying the five rooms. There is one guest room on the third floor. The rest of the space on the third floor has been made into a large room for the class in free-hand drawing.

At the regular meetings of the Club routine business is transacted and a speaker is generally provided. Most of the talks are architectural subjects, but frequently they are along entirely different lines. Dances, amateur shows, and dinners are also on the program each year; and on the Fourth of July, this year, a pilgrimage to the State Capitol at Jefferson City was conducted by the Club.

In October of last year eighty students enrolled in the Atelier conducted by the Club. The problems given the Atelier's classes are the same as those given the day students in the School of Architecture at Washington University, and are judged along with the day school's work. Credits earned in the Atelier can be applied to the day course conducted at the University.

A summer Sketch Class is also conducted by the Club, and an annual prize of $150.00 is awarded for the best work.

If there is any further information I can give you, I shall be only too glad to do so.

Yours very truly,
John A. Bryan.

THE PEN AND BRUSH CLUB.

THE Pen and Brush Club was founded in 1894, when the School of Architecture was still a part of the Lawrence Scientific School of Harvard University, and was composed of the students of architecture and the fine arts in the College. When the School of Architecture became a separate graduate school the club was continued but contained only students in the School. It was dissolved in 1912.

In 1919 a desire was felt for some form of social organization in the school and a club was formed, the name of the former club being used. The following constitution was adopted:—

CONSTITUTION

To promote a stronger feeling of friendship and unity among the members of the HARVARD ARCHITECTURAL SCHOOL, to afford opportunities for meeting other students of architecture, and to provide entertainments, instructive talks, and other social meetings—the undersigned have joined together and formed a club.

ARTICLE I.

This Club shall be known henceforth as

THE PEN AND BRUSH CLUB

ARTICLE II.

Its officers shall consist of a President, Vice-President, and Secretary-Treasurer who shall be elected for one year by a two-thirds majority vote of the members present at the first meeting in May.

ARTICLE III.

The President, or Vice-President in case of the absence of the President, shall be empowered to call meetings, nominate committees, and otherwise conduct the business of the club. The Secretary-Treasurer shall be empowered to collect the annual dues hereinafter specified and the special taxes from active members, i. e. present members of the school, and to use these funds as the club may direct.

ARTICLE IV.

The annual dues shall be $3.00 per year until changed by a two-thirds vote. They are payable on or before the Christmas recess.

ARTICLE V.

Amendments and additions to this constitution may be proposed at any regular meeting of the club and become effective when passed upon by two-thirds of the members of the club.

All students in the School of Architecture are members of the club.

An account of the year 1923-24 may give an idea of the Club's activities.

Besides the usual business meetings (held normally about once a month) a dinner was held in November in the building of the Harvard Lampoon. The guests of honor were Dean William Emerson of the Massachusetts Institute of Technology and Dean George H. Edgell of the Harvard School of Architecture.

In February the annual Fête Charrette took place. The Fête Charrette is a dance modelled, as far as conditions will permit, on the Quatz' Arts Ball of the Ecole des Beaux Arts in Paris, and is given annually in conjunction with M. I. T., one school providing a hall, decorations, music, refreshments, etc; and the other, giving a short entertainment. This year the party took place at the Rogers building, M. I. T. and Harvard put on an entertainment of an informal nature.

Several speakers addressed the club at special meetings during the year. The most noted was Mr. Thomas Hastings of Carrère and Hastings, New York, who came late in April.

Usually the club has an annual picnic and outing late in May or early in June, but this pleasure had to be omitted this year owing to a charrette and the arrangement of examinations.

Along with its other activities the club has this year devoted time to decorating the common room in the basement of Robinson Hall, the School's building. The room is being remodelled in the "Gothic taste" and it is hoped that the work will be completed before the end of the next school year.

THE ARCHITECTUDRAL CLUB OF THE UNIVERSITY OF TORONTO

CONSTITUTION

ARTICLE I.

Name and Purpose.

Section 1. This organization shall be known as "The Architectural Club of the University of Toronto," hereinafter referred to as "The Club."

Sec. 2. The purpose of the Club shall be to encourage study and research in Architecture and to promote a spirit of good-fellowship amongst the members.

ARTICLE II.

Membership.

Section 1. The active members of the Club shall be under graduates and graduates of the Department of Architecture in the University of Toronto.

Sec. 2. Associate members shall be university graduates and undergraduates interested in architecture. They shall be elected by a two thirds majority of the undergraduate active members. They shall neither vote nor hold office.

Sec. 3. Honorary members may be elected from the members of the Faculty in the Department of Architecture of the University of Toronto, and from those having won special distinction in architectural and artistic work.

They may make motions and discuss them; but they shall have no vote.

ARTICLE III.

Duties and Privileges of Members.

Section 1. It shall be the duty of active members to engage in the discussion of papers read before the Club.

Sec. 2. It shall be the privilege of members to deliver an address or read a paper before the Club on request of the Executive.

ARTICLE IV.

Officers

Section 1. The officers of this Club shall consist of Honorary President, President, Vice-President, Treasurer, Secretary and four Councillors.

Sec. 2. The officers shall constitute the Executive Committee.

Sec. 3. Officers shall be elected at the last regular meeting of the academic year.

Sec. 4. The President and Vice-President shall be members of the Fourth Year.

The Treasurer shall be a member of the Third year.

The Secretary shall be a member of the Second Year.

The Councillors shall be elected one from each of the first three years and one from the graduates.

Sec. 5. The term of office shall be one year. No member holding an office shall be re-elected to the same office.

Sec. 6. All elections shall be by the Hare-Spence system.

ARTICLE V.

Duties of Officers.

Section 1. It shall be the duty of the President to preside at all meetings, to appoint all committees not otherwise provided for, to make appointments, to fill vacancies, and to perform all duties usually incumbent upon this officer.

It shall be further the duty of the President to call a special meeting upon receipt of a written request signed by three active members.

The President shall be a member ex-officio of all committees.

Sec. 2. It shall be the duty of the Vice-President to perform the duties of the President in the absence of that officer, to assist him whenever required and to audit the Treasurer's report.

Sec. 3. It shall be the duty of the Treasurer to collect all Club monies and dues, to make disbursements for debts which have been regularly and lawfully incurred by the Club; to keep an accurate account of all receipts and expenditures and to submit a report at every meeting or at the order of the President.

Sec. 4. It shall be the duty of the Secretary to take accurate minutes of each meeting of the Club, and to keep all records and papers pertaining to the Club. He shall conduct all correspondence of the Club, notify members of every meeting and post notices and perform all duties usually incumbent upon this officer.

Sec. 5. It shall be the duty of the Councillors to represent their respective interests in all matters pertaining thereto, that may come before the Executive, and to perform all duties assigned to them by the President.

ARTICLE VI.

Meetings.

Section 1. Regular meetings shall be held on the first and third Tuesdays of each month in the Academic year.

Sec. 2. The date of any meeting may be changed at the discretion of the Executive.

ARTICLE VII.

Fees.

Section 1. Each active associate member shall pay an annual fee of one dollar ($1.00).

ARTICLE VIII.

Amendments.

Section 1. This constitution may be amended or altered by a vote of two-thirds of the active Club members. Notice of motion for amendment must be given two weeks before the proposed amendment is voted on by the Club.

Sec. 2. Amendments or alterations to the constitution may be voted on only at regular meetings.

Sec. 3. All amendments must be submitted to the council of the Faculty of Applied Science for approval.

ARTICLE IX.

This constitution shall be binding when ratified by two-thirds of the members of the Club.

BY-LAWS.

1. Regular meetings shall be called to order at 8 P. M.
2. A number equal to a majority of the undergraduate members shall constitute a quorum.
3. All dues shall be paid on or before the second regular meeting after they are imposed.
4. Nominations of officers shall be in writing and signed by the mover and seconder.
5. The officers shall be elected by ballot as provided.
6. Scrutineers shall be appointed by the chair.
7. Bourinot rules of order shall govern in Parliamentary proceedings.
8. The order of business shall be.

Roll Call.
Reading of minutes.
Reports of officers and committees.
Old business.
New business.
Nomination of officers.
Election of officers.
Address of evening.
Discussion arising out of address.
Adjournment.

THE GALLEON IN DECORATION

(*Continued from Page* 69)

tures of the actual ships of the period is very limited. As to their development from the galley to The Great Harry in England, it is mainly upon the work of artists, meagre and largely imaginative, that our modern ideas are based as to how the ships appeared. That sails had supplanted oars as the idea of propelling the ships was the principal development to be noted between the types of ships of the eleventh and twelfth centuries and the time of Columbus. Oars and sweeps were used for auxiliary propulsion, however, to a much later date, but they no longer figure as an obvious feature of the craft.

A Free Employment Service for Readers of Pencil Points

(*Other Items on Page* 114)

Junior Draftsman, three years' experience, wants position with reliable architectural firm in New York City. Phi Beta Kappa, graduate University of Michigan. Salary $30 per week. Box 73-C, care Pencil Points.

Wanted: A permanent connection where experience, responsibility, good judgment, ability to handle men and turn out big work in record-breaking time will be properly rewarded. Registered in Michigan. Edwin W. Byers, 15405 Myrtle Ave., Harvey, Illinois.

Position Wanted: Architect's or builder's Superintendent. Young man 33, married, 16 years' outside experience with New York Architects and Builders as Superintendent of apartment houses, office buildings and theatres. Four years' experience as a draftsman. Location New York City or vicinity. Alexander Ilg, 2656 Decatur Ave., Bronx, New York City.

Atwood and Nash, Inc., architects and engineers, Chapel Hill, North Carolina, desire to secure two or three Class A architectural draftsmen for work on high class public buildings which will last several months and may be permanent.

Position Wanted: Artist, educated architect, first-class designer, spec. perspectives, with about 15 years' experience, also in fine art furniture and lighting fixtures, wants suitable steady position. Prefer Chicago or New York. Box 74-C, care Pencil Points.

THE DRAFTSMAN WITH A JOB

THE discussion going on in your columns about the Draftsman with a Job is really interesting. Better understanding between employers and employees and some good result might come out of it if both parties looked at things a little more from the other fellows side. In the meantime it is a bit amusing to note that, as in every debate, each party is very much convinced, or seems so, that what is to his advantage is necessarily to the general good. As a winning argument sonorous words such as "profession" and "service" are resorted to exactly as the words, "nation," "patriotism," "ideal," etc., are used by persons mainly interested in the triumph of party politics in the hope that the fear of appearing not to possess these virtues will make their opponents side with them.

True, some draftsmen are inclined to lose sight of their employers' difficulties and responsibilities but often also we find an effort, probably unconscious, on the employers' part, to keep their men down, use them as mere tools which are cast aside when not needed any more or when worn out. The draftsmen are bound to feel it. In defense of this policy it is said that the overhead is tremendous and that high salaried men cannot be kept when not absolutely needed on account of the many ups and downs in the architectural business. The very fact that there is some ground for this argument ought to bring forth the extenuating circumstance for the attitude of many draftsmen.

In this state of unsteadiness, the cheap man, unambitious, timid, therefore easily satisfied, will find another job with comparative ease. But what of the draftsman, who by self-denial of comforts and pleasures to have more time for study and hard work, is constantly improving his capabilities and expects his legitimate reward? Why should he be denied the stimulus of better pay and be told that he should be satisfied with the intellectual delight in the acquisition of knowledge for itself? Dissatisfaction will prey on him when he finds out that as years go by salaries do not increase in proportion with his needs and capabilities. Contrary to other professions salaries are comparatively high with us at the start and inadequate later. A man with a knowledge several times superior to another will be ridiculed if he asks double the latter's salary. A difference of a few dollars more will make his job unsafe. Labor unions level the skill of the workman by standard prices and our employers by their preference for cheaper men, even if not quite so good, tend to create the same thing with us. But after all the architect is perhaps right. Why hire expensive men to turn out very good work and reduce profits for an undiscriminating client who will not appreciate it? He was won over by the architect's eloquence, which may also convince him that he is getting an extra good job. How is he going to visualize that a better result could have been gotten with more skilful architectural planning and study?

The writer has met many a client who rejected a plan on which they seemed to agree as to its merits but would not allow its execution on account of the idea being new or somewhat out of the ordinary. The average draftsman therefore will just get the average professional knowledge in the course of time and not feel the impulse to improve himself. It is easier to hang around a pool room evenings than to go to night schools and take up long and tedious studies which may bring no further financial reward.

Some men have found recognition with their employers and are given good positions and partnership interests. The hope of such recognition makes many draftsmen credulous and patient when their prospective employers tell them: "O! We do not pay high salaries but we give bonuses, interests, substantial Christmas presents etc. We want our men to work for a future and bigger common purpose rather than for the Saturday envelope."—a talk many draftsmen have heard and taken seriously. The man is hired say in January, a few months later, better pay is offered to him but he declines it thinking that his loyalty is going to be appreciated. Just about when he is looking hopefully towards the approaching Christmas he is fired with the excuse that he is no good or, with many circumlocutions, he is notified that, contrary to the firms expectations, work is running low and a previous bad year or some other cause makes it impossible for the firm to consider giving him more than what he found in his envelope on Saturdays! Useless to argue when he knows he stands an Indian's chance. He will look out for himself next time and naturally take advantage of the fluctuations of supply and demand, for which he will be blamed by the employer, but at least will have made hay when the sun was shining.

Realizing however that this is not an entirely satisfactory solution to his problem and that the best would be to work for himself, his longing will be in that direction. He is now beginning to make acquaintances that will give him a small job now and then but not important enough to branch out altogether, especially that he has no financial or influential backing. The job is not of sufficient importance to appeal to his employer if he brought it to the office, and he will be quite justified in his reluctance to do so for the benefit of an office in which he does not feel permanent. So he works on the side. How can anybody demand from him such angelic abnegation as to refuse a personal financial interest and the sacrifice of a job he may point to or fall back on, for the benefit of an employer who, he knows, is going to fire him at the first sign of a slow down.

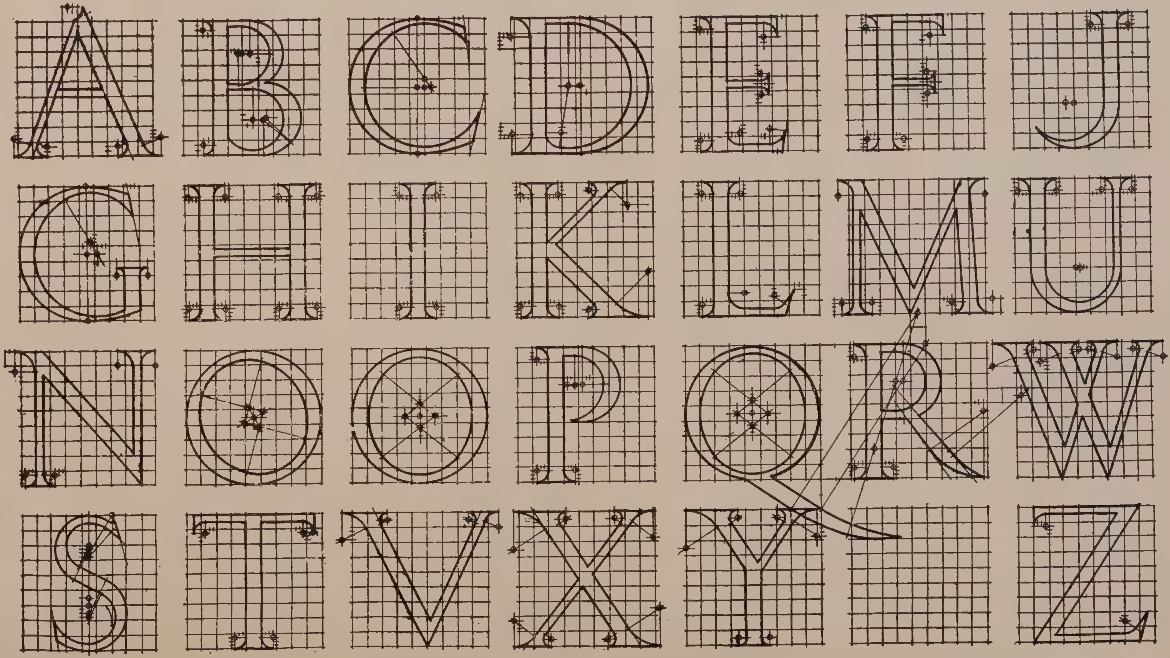
Mr. Crowen, your contributor from Chicago, whose letter appeared in a recent issue, is entirely unjust to the draftsman when he writes: "The pernicious habit has become so aggravated that it has made draftsmen dishonest to the extent of stealing their employer's jobs where they can, etc." Jobs draftsmen get are very seldom, if ever, 'stolen property.' Sometimes the architect leaves to him such small jobs as he himself is not interested in and that will not yield his organization any profit. More often the draftsmen get their jobs from channels and acquaintances of their own, entirely independent of their employers' connections. These could have been made to come to the main stream had the draftsman not been discouraged from doing so by the causes discussed above. It is not often either that the client will decide to go to the draftsman because, as the above mentioned gentleman pretends, the smaller overhead will permit a smaller commission. Some clients realize that their job is not of such importance that will make the architect wait on them and give them undivided attention. They know that the work will be entrusted to some subordinate who will also be told not to fuss too much with it but get it out quickly in order to pay the subordinate's salary, the overhead which is big, the firms prestige and the architect's profits for the occasional glance he may or may not give to the draftsman's board. Neither is the client the loser when he realizes that his job, meaning more to the small man, better attention will be obtained if the man doing the work is getting all the commission.

If there were a means of stabilizing the architect's business and the draftsman's position and allowing him the incentives that would make him take his employer's interest to heart he would be found more stable and dependable.

Truffles, a great delicacy in French cooking, grow underground at the foot of oak trees and are discovered by pigs whose owners prevent them from eating the result of their search. The animals soon get wise to the futility of this trouble for the sole benefit of their owners and make no further effort. The greedy French peasant has learned that the animal must be encouraged by being allowed some share.

The architects have the controlling position in the situation and more facilities at their disposal to take the first step to improve the conditions which Mr. Crowen deplores without pointing to a remedy. I trust it is his endeavor to reach a fair solution that makes him wish to hear from other architects and in fact it will "render the profession a great service" if it is realized that many draftsmen of to-day deprived of financial, or influential backing may not be as the more fortunate ones, architects of tomorrow and that these same men can give much to the profession if they are encouraged rather than hampered.

"Optimist"



Alphabet Attributed to Leonardo da Vinci. Reprinted by request from Vol. I of Pencil Points.

HERE and THERE and THIS and THAT

Conducted by R·W·R

WE WILL pay fifty good hard round American dollars to the person submitting to this department before November the 15th, 1924, the best letter of one thousand words or less dealing with the subject of the editorial printed in this issue of PENCIL POINTS.

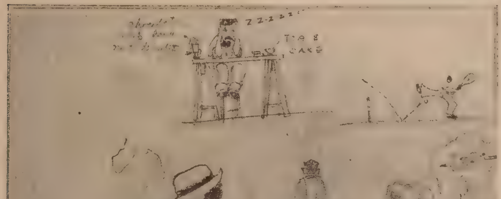
This competition is open to anybody without condition or restrictions of any kind and the prize will be awarded for the letter offering the best practical suggestion or suggestions for promoting a better appreciation of the value of the services rendered by members of the architectural profession.

The prize-winning communication will be published in the December issue of this paper. All letters should be addressed to the Editor of PENCIL POINTS, 19 East 24th St., New York.

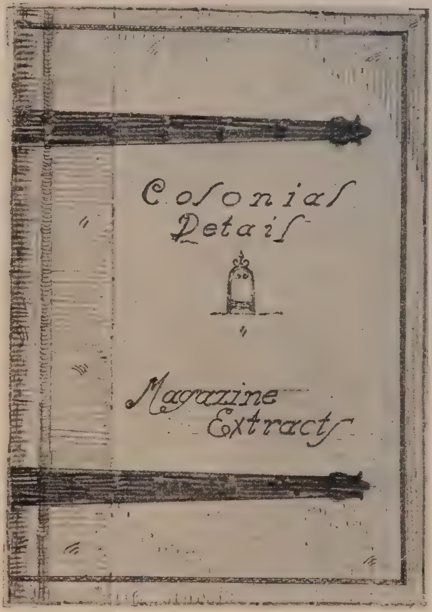
THE heading reproduced above submitted by Mr. William Puddington, Battle Creek, Michigan, won Place Number Three in our little competition.

NOW, don't forget to send in your sketches for the PENCIL POINTS Sketch Competition which closes on October the 20th. Even though you may feel that you are not likely to win a prize, send in your sketches just the same. You never can tell.

The complete program appears on Page 106 of the September PENCIL POINTS.

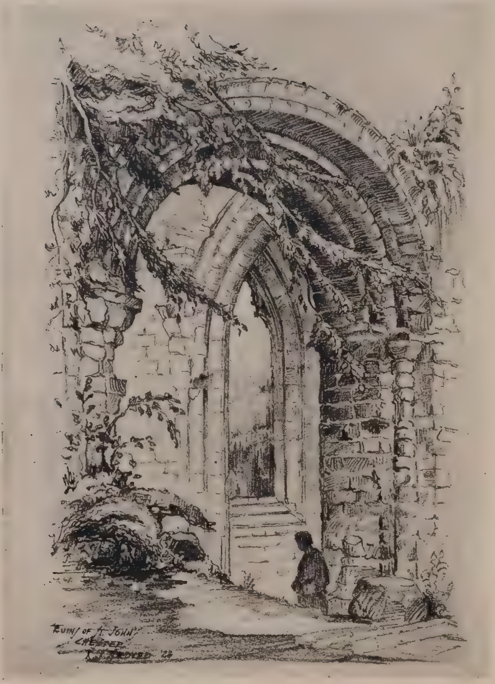


Sketches by Andrew F. Euston, Atelier Hirons. "Gambaro, winner of one of the Princeton architectural prizes, at the Graduate College."

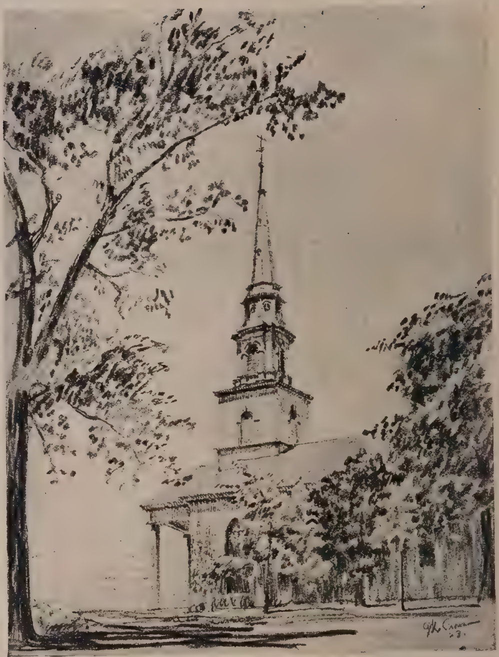


THE little discussion we started a few months back regarding the filing and preservation of miscellaneous printed matter of value to the architect and draftsman seems still to be a live subject. PENCIL POINTER Aaron M. Kiff of New Britain, Connecticut, has this to say on the subject and we reproduce above his pencil drawing of the attractive cover in which he binds his volumes:—"Here is a stunt that may interest you for H. T. T. & T. column, about filing away plates, etc., from the magazines. I have saved the stuff in groups such as Colonial, Classical, Renaissance, etc., and then in groups as to types—country houses, office buildings, etc., and had them bound separately into books. The picture shows what I did to a volume of one hundred and fifty measured colonial details and subject matter. The book is the size of the Architectural Record. It has a light gray paper cover on board (very durable I find) with green vellum-cloth back. The job cost me one dollar and a half to have bound and about an hour to decorate with a pen and some black ink. The hinges go around the book on the back giving the two black bands on the shelf back. Between these on the shelf back I have just lettered "Colonial" and I will say it looks well with my other books on the shelf. The lettering is in black and the footscraper on the front also. The black pen line around the edge just binds the design together. It makes a cheap and a very durable way for the draftsman who has no files to keep such stuff.

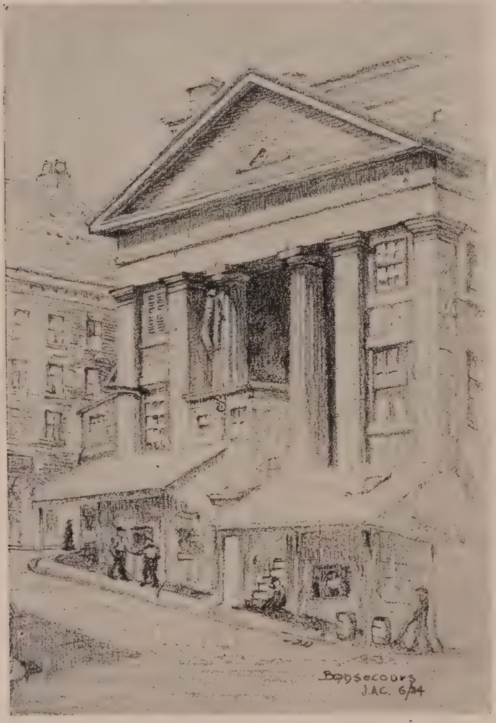
R. A. GRAMMER, 22 Jenison Street, Newtonville, Mass., has the first four volumes of PENCIL POINTS substantially bound in four volumes and would like to hear from anyone desiring to purchase this set.



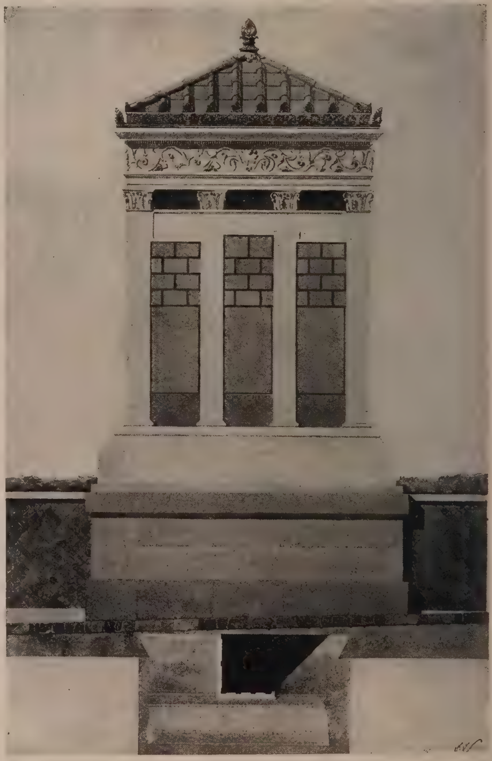
Ruin of St. John's, Chester, by R. J. Nedved.



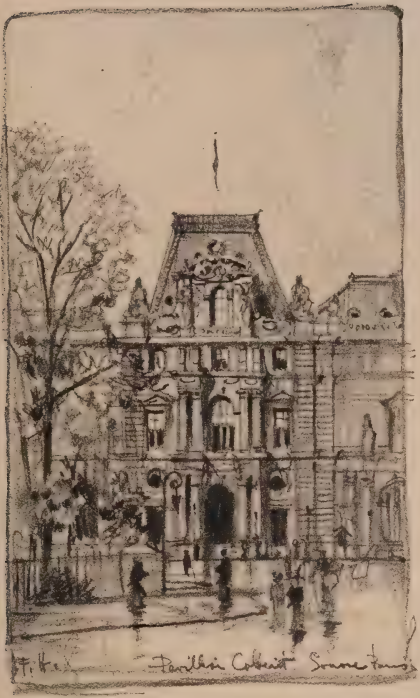
Trinity Church, Newark, N. J. Pencil Sketch by George Kenneth Crowe, New York.



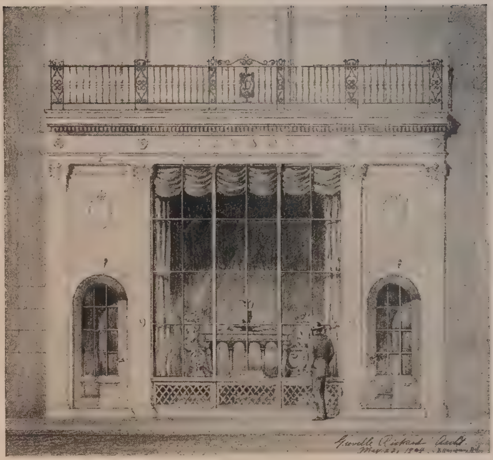
Sketch by J. A. Currie, Notre Dame de Grace, Montreal.



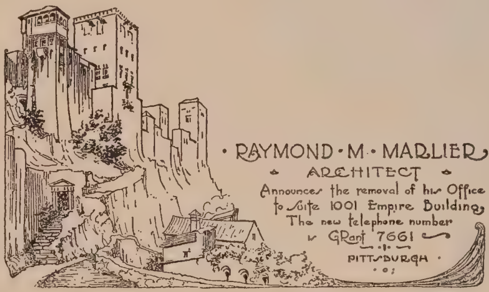
Restoration of a Pompeiian Tomb by Antonio Giglio, New York.

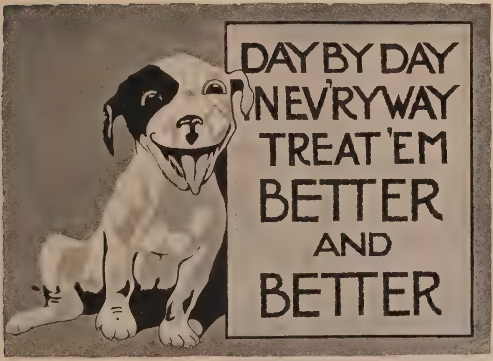


Pavillon Colbert, Paris, by Frederick Hodgdon, Chicago.

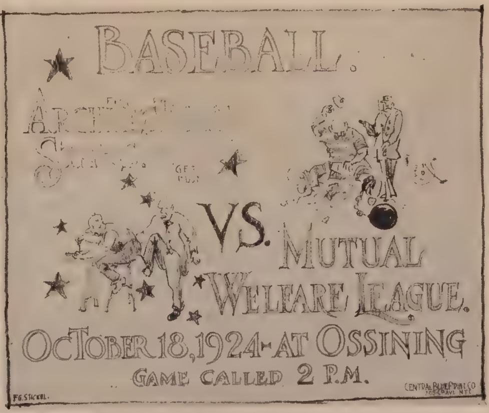

Greville Rickard Archt.

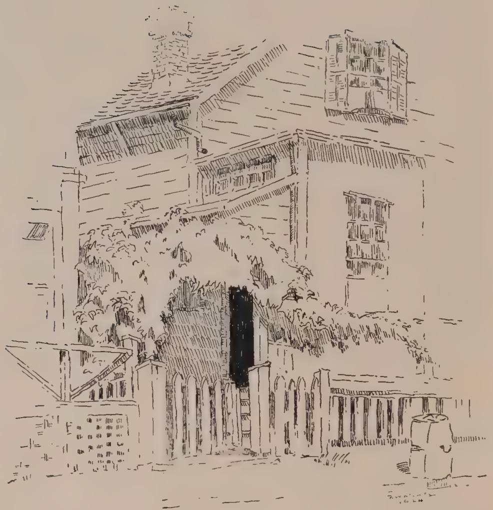
Rendering by V. Hagopian, New York. Dawson Antique Shop, Greville Rickard, Architect.



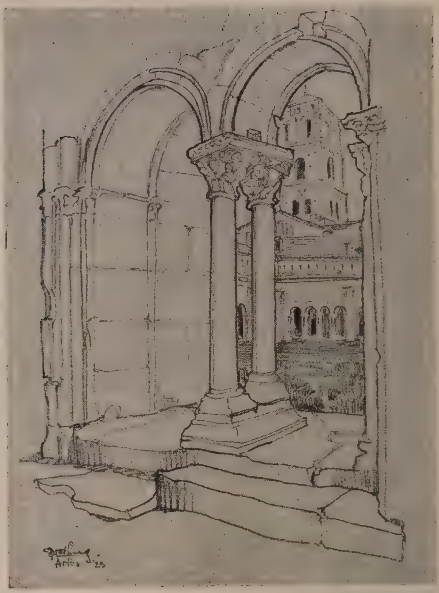


Drawing by Gordon P. Nassel, Buffalo N. Y. Awarded first prize in the competition open to High School pupils for S. P. C. A. poster.

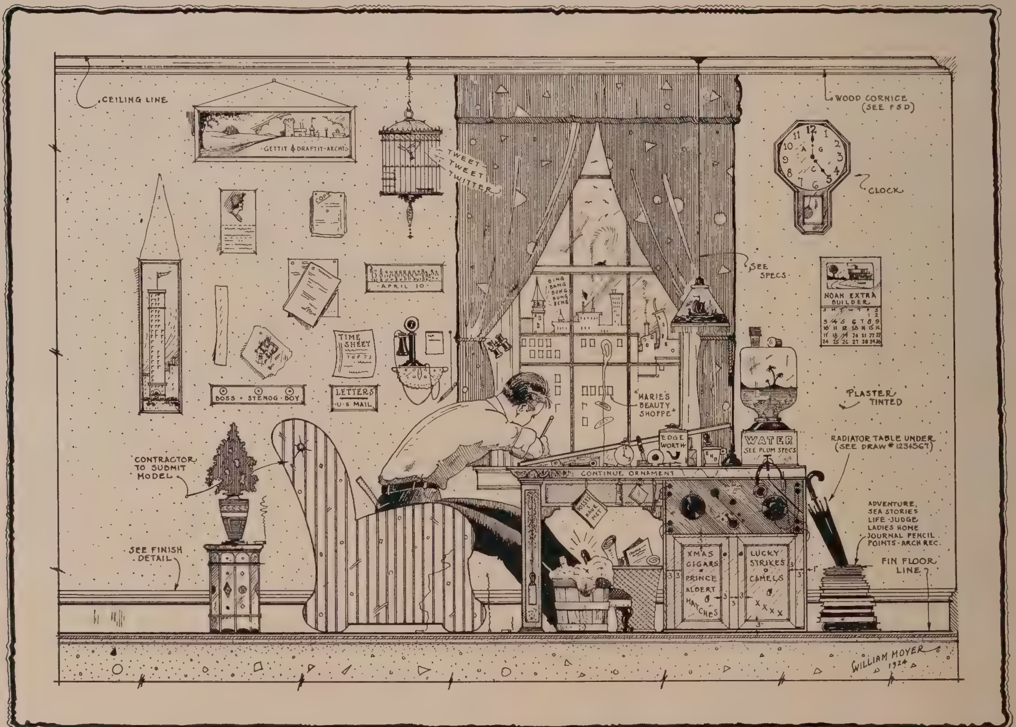




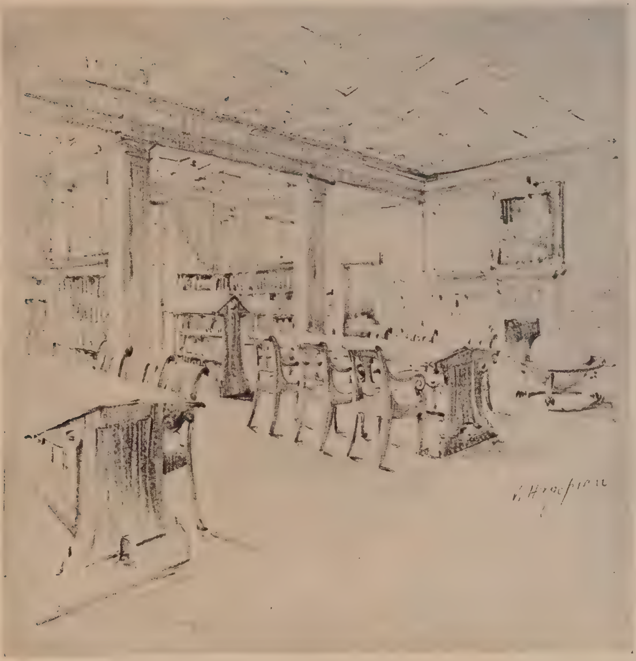
A Gateway in Randall Court, Newport, R. I. Sketch by Philip W. Kratz, New York City.



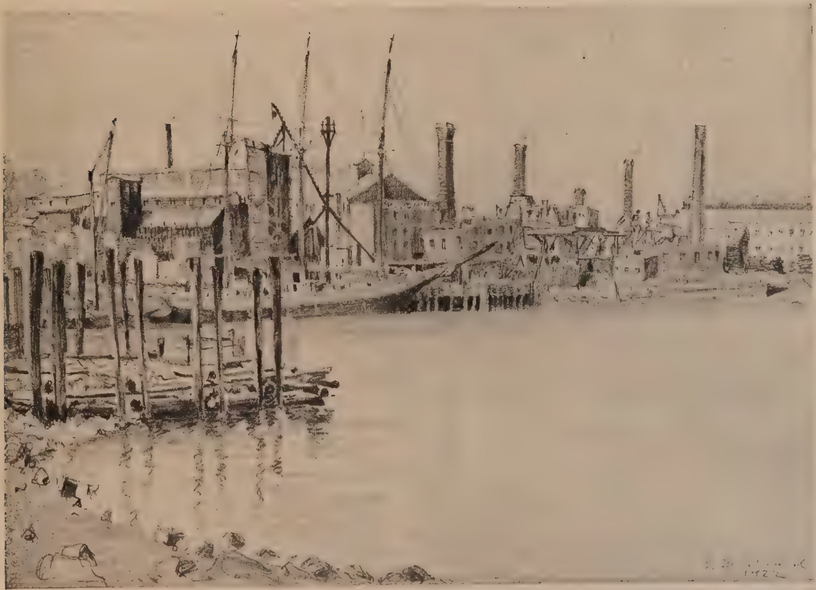
Sketch by Wm. P. Spratling, Tulane University, New Orleans, La. Cloister of St. Trophime, Arles.



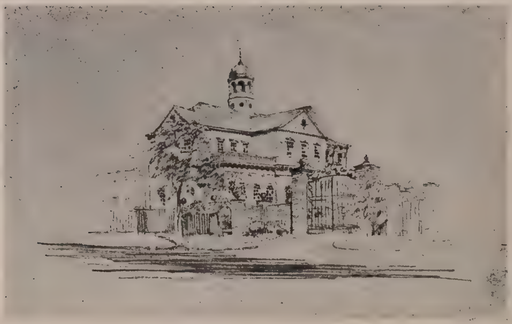
The Draftsman's Dream, or "Setting Pretty," by William Moyer, Boston, Mass.



Quick Study of Display of Furniture in Library, by V. Hagopian, New York.



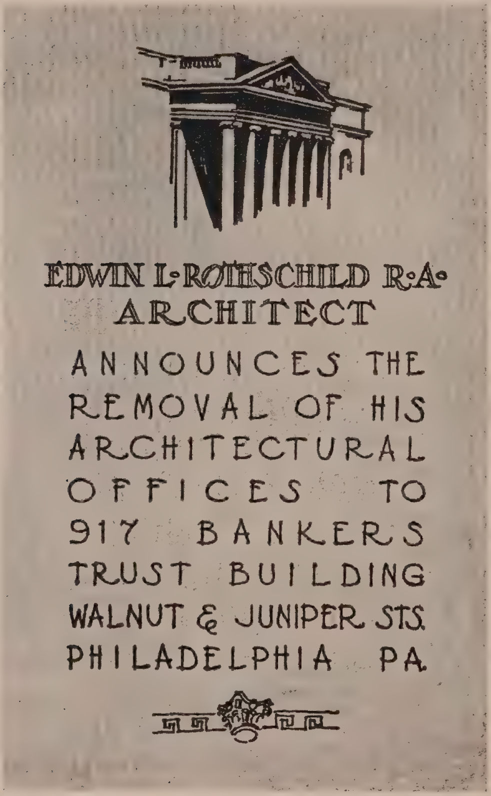
Shore of East River at Astoria Looking Toward Hell Gate Bridge by Oliver M. Wiard, New York.



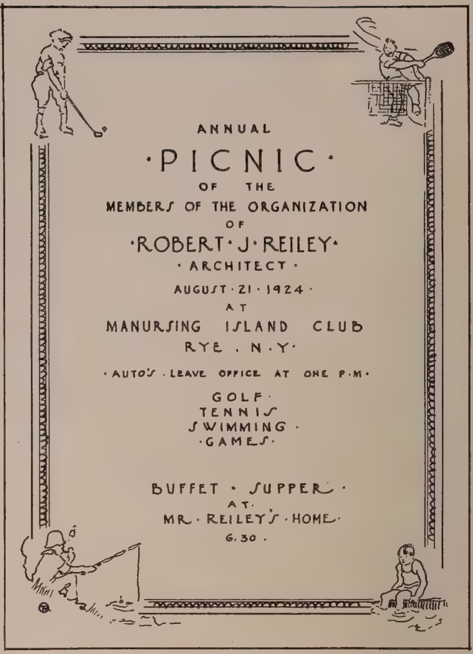
Pencil Sketch by George Kenneth Crowe. Harvard Hall, Cambridge, Mass.

MODESTY is said to be a wonderful trait and maybe it is, but just now it is costing a chap ten dollars. To elucidate—Oong Gow has just been awarded the ten dollar prize for the best contribution submitted to this column for September; but we can't send him the check because we don't know what his real name is and we don't know where he lives. So if he will be a little less shy and a little more practical and let us know these things, we will complete the transaction with utmost speed.

N. B. If more than one Oong Gow lays claim to this prize, positive proof of genuineness will be required.



EDWIN L·ROTHSCHILD R·A·
ARCHITECT
ANNOUNCES THE
REMOVAL OF HIS
ARCHITECTURAL
OFFICES TO
917 BANKERS
TRUST BUILDING
WALNUT & JUNIPER STS
PHILADELPHIA PA



ANNUAL
·PICNIC·
OF THE
MEMBERS OF THE ORGANIZATION
OF
·ROBERT·J·REILEY·
·ARCHITECT·
AUGUST·21·1924·
AT
MANURSING ISLAND CLUB
RYE . N·Y·
·AUTO'S·LEAVE OFFICE AT ONE P·M·
GOLF·
TENNIS
SWIMMING·
·GAMES·
BUFFET · SUPPER·
AT·
MR·REILEY'S·HOME·
6.30.

THE above reproduction of the announcement of the annual picnic of the members of the organization of Robert J. Reiley is not submitted as news as this party was held as per schedule on August 21st and our special staff representative reports that the refreshment table fairly groaned under its weight of dainty viands and that a good time was had by all.

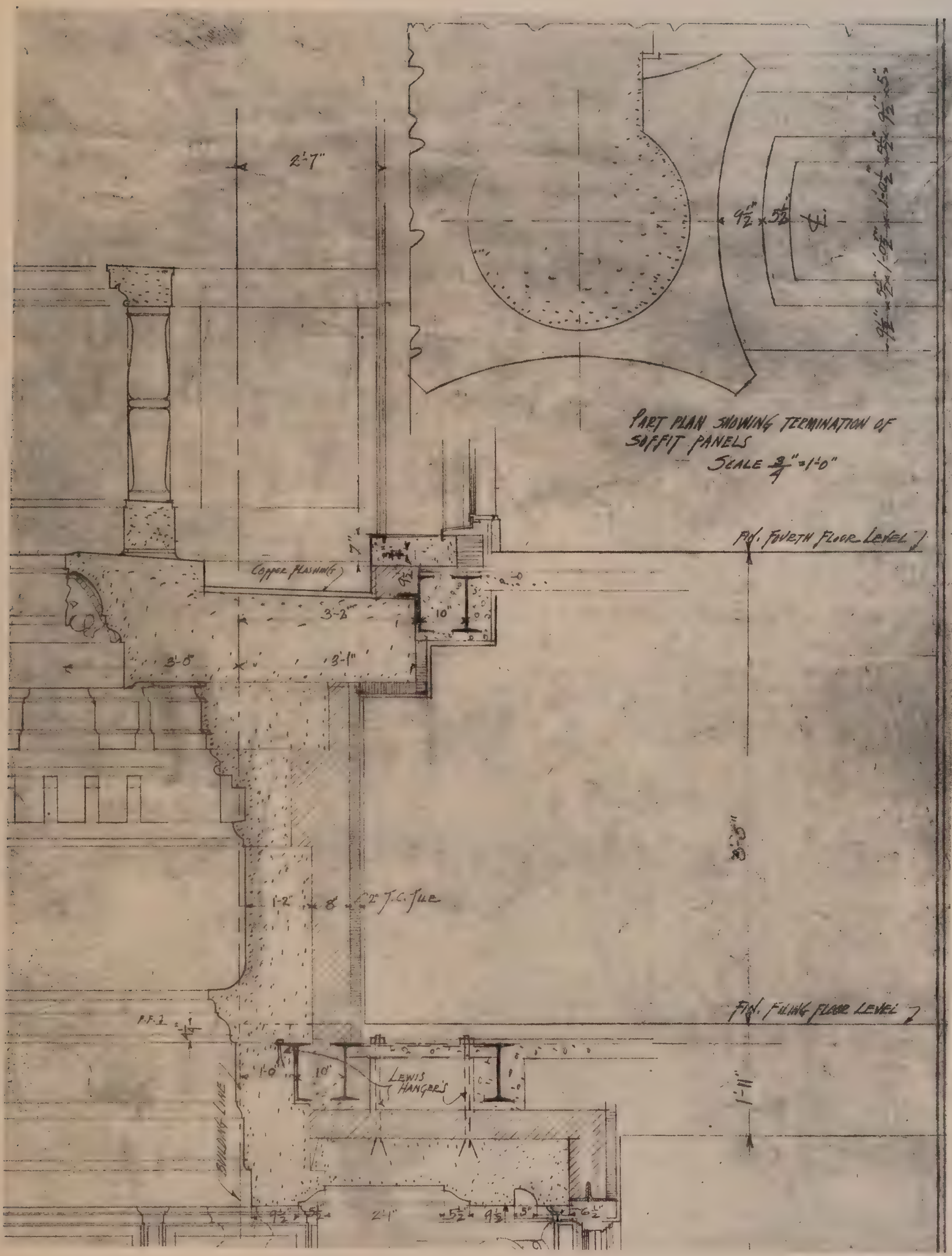
JAMES W. PHILLIPS, 611 Raleigh Ave., Norfolk, Va., wants to secure the January, March, and April 1921 issues of PENCIL POINTS. He has extra copies of September, November, December 1921 and January, February, April, May, June 1922 which he will exchange.

ARCHITECTURAL CLUB OF THE UNIVERSITY OF TORONTO.

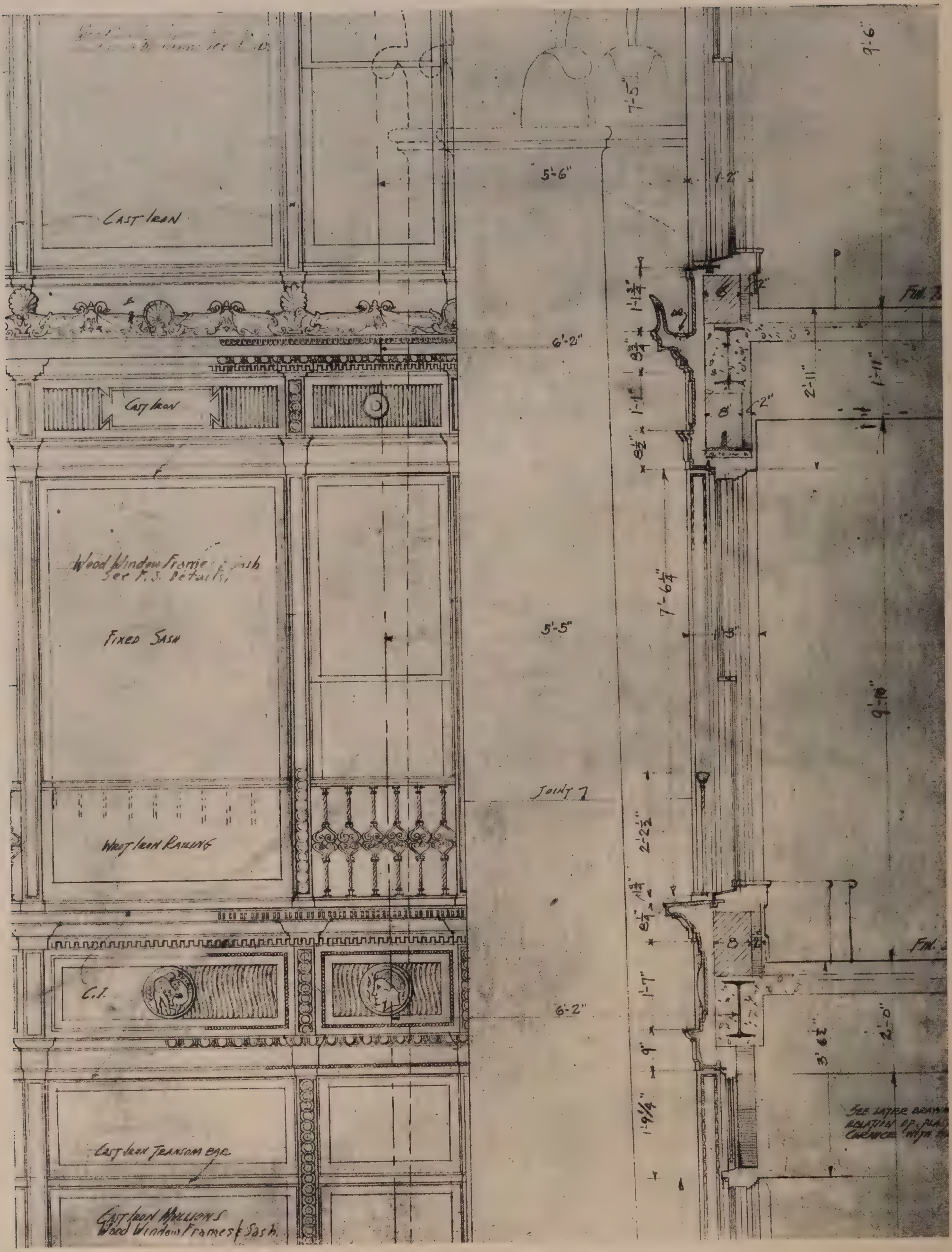
THE first event of any note in the fall is a get-together dinner when members of the staff are heard from and the freshmen are initiated. During the year several dinners are held and prominent architects are invited to address the club. These talks are very instructive and always create a great deal of interest. Throughout the fall term outdoor sketch classes are held each week. This part of the work is very attractive and great interest is taken in sketching. Whenever convenient the members of the Club are taken to the various art exhibitions where criticisms of the various works are given. At the end of the year an exhibition of the work is held which includes the architectural drawings, pen and ink, pencil and water color sketches and modelling.

First Draftsman—My elephant has all broken out in a rash. What shall I do about it?

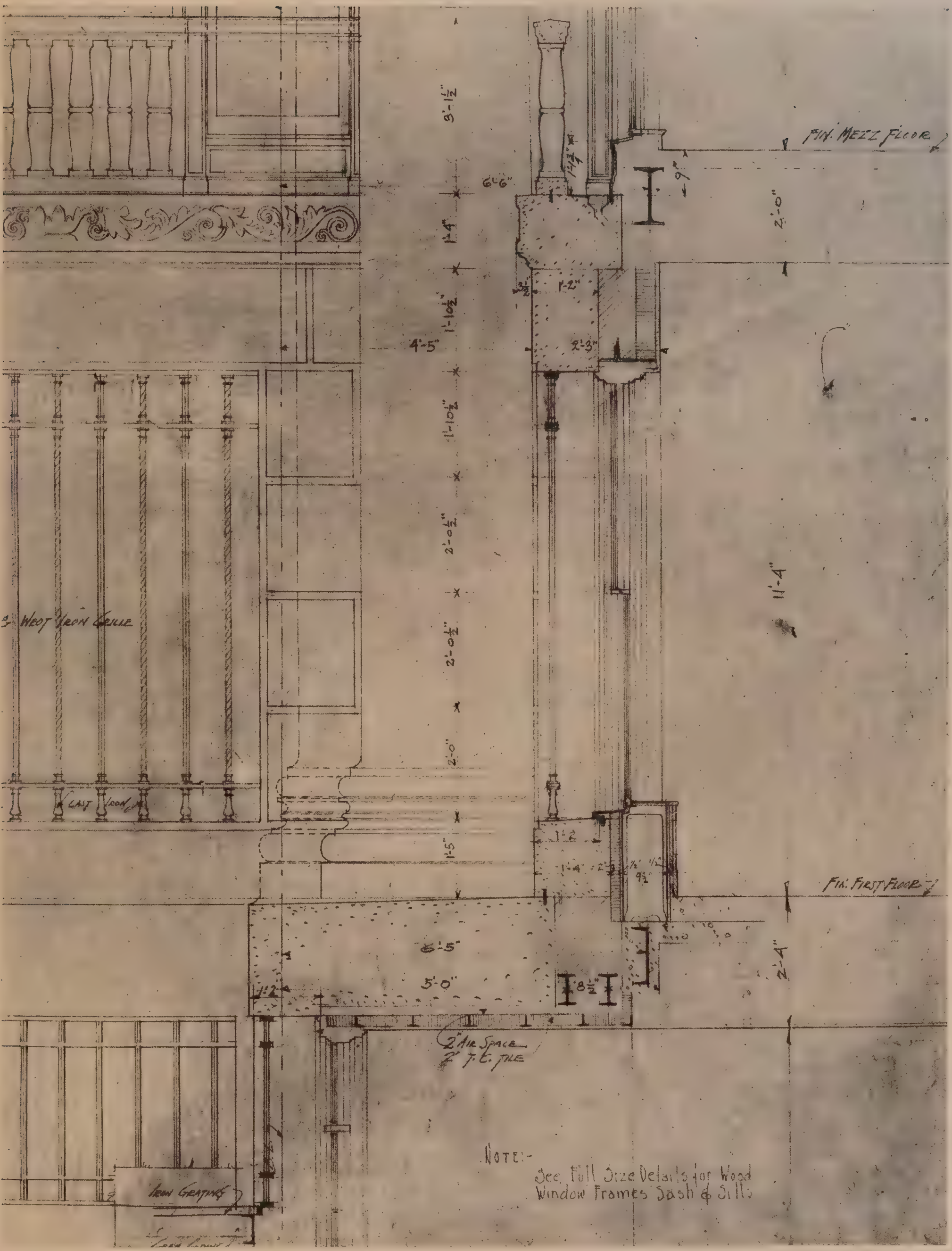
Second Draftsman—Consult a pachydermatologist!



Details of Construction.—Seaboard National Bank, New York City, Alfred C. Bossom, Architect.



Details of Construction.—Seaboard National Bank, New York City, Alfred C. Bossom, Architect.



NOTE:-
See Full Size Details for Wood Window Frames Sash & Sills

Details of Construction.—Seaboard National Bank, New York City, Alfred C. Bossom, Architect.

THE SPECIFICATION DESK

A Department for Specification Writers

WHAT A SPECIFICATION WRITER SHOULD BE

WE HAVE received an interesting communication from one of our subscribers who is also a specification writer in a large office.

As a starting point for a discussion of the qualifications and duties of a Specification Writer, our correspondent contributes two outlines; one dealing in the form of an analysis with the training, experience and duties which the ideal Specification Writer should possess and exercise; the other dealing in similar form with the specification writer as he frequently is. These analyses are presented herewith for the study of those interested in this Department. We shall be pleased to receive and publish any comments which may be suggested by these analyses, and also by the broader question as to just what a Specification Writer should be, just what his relations should be to the other members of the organization in which he is working, so that the specification when finally produced may be the best possible document for the purpose of furnishing a proper guide to the contractors in figuring on and completing the construction of the building.

To say that the drawings and specifications together should tell a complete and harmonious story is trite; that's what the drawings and specifications are for and everybody knows it. But frequently they fail in one or more respects, as a result of which a long train of evils with which we are all familiar crops up in the job, either in the preliminary stages of securing bids or in the actual putting together of the building, or both.

To repeat that better specifications are usually required on a large proportion of the jobs is again repeating what everybody knows. It is the primary purpose of this department to disseminate information which will assist the architect to write his own specifications as well as to assist the man employed to do this highly important branch of his work. We believe that the time has passed when general statements on the subject of specifications possess any great value. What is needed is careful thought on the part of the many men all interested in the same subject and a gathering together and dissemination of various items all calculated to bring about better practice in specification writing. These columns are open for a discussion of this subject in any of its phases, and it is earnestly hoped that a large number of our readers will cooperate with us in order that the ends we are all seeking may be achieved.

Questions submitted to this department on any branch of specification writing will be submitted to a group of men who by long training and experience have probably met, and in many cases, solved, just those problems, and the answers will be published in this column. Any suggestions for the improvement of any department of specification work will be carefully considered for publication whether they be brief notes dealing with some comparatively small item, or more extended discussions of fundamental methods which have been worked out and found to be successful. There is no more important document produced in connection with building operations than this same specification we are talking about. It comes in for criticism from the time the first rough draft is made until the final payment on the job goes through, and seldom does the specification go through this ordeal without having a few dents put in it and without producing wailing and gnashing of teeth somewhere. If we by all our combined effort can make every specification prepared just a little better than it otherwise would be, we will have accomplished something of direct benefit to the architectural profession at large, and everybody connected with it. That is our purpose. We don't expect to revolutionize Specification Writing over night, but by bringing together here where all may see a discussion of the knotty problems and a solution of some of them, partial or complete, progress will be made.

So let's tackle this thing with a determination to make some definite progress every month, and let's start now!

THE SPECIFICATION WRITER

An Analysis

EDUCATION
- English Composition
- Architectural (college, preferable)
- Constant study of books and magazines
- Business judgment developed

EXPERIENCE
- Draftsman
- Superintendent of Construction
- Solicitation of bids and award of contracts
- Knowledge of
  - Materials and Methods
  - Various Standard Specifications
    - A. S. T. M.
    - Federal Specification Board
  - Underwriters' Rules
  - Building laws and regulations

DUTIES
- Advise (if not control) production of drawings
- Assist Superintending Construction
- Participate in general business activities as relates to construction, at least
- Produce a clear, concise and comprehensive specification.

THE SPECIFICATION SHOULD BE
- Clear, concise, coherent narrative of use of materials and methods and the means of accomplishing results desired.

THE AVERAGE SPECIFICATION WRITER

An Analysis

EDUCATION

Lack of facility in English composition.

This is one subject that is anathema to the average student.

College education either neglected or never secured.

The college education presumably directs the activities of the student quite strongly toward design and it is hard to imagine a designer interested in specifications. The average human, even in architecture, hates to study after entering business, evidently believing that his education is completed.

The development of business judgment is usually impossible because of lack of contact with business and a more intimate contact with the lackadaisical business of professional practice.

EXPERIENCE

Usually it may be expected that some drafting experience has been had but its value as a preliminary to specification writing is a big factor.

Experience as a superintendent of construction has been had to some extent but if at least two years experience has not been had the value of such experience may not be great enough for the duties expected.

The work of soliciting bids and awarding contracts may be said to be so closely held in the business activities of the architect and his stenographer that contact with such activities is difficult to obtain.

The knowledge of building materials, methods, laws and rules can only be obtained by study and an understanding of drafting and superintending. Whether or not such knowledge is obtained depends on the man but it is believed the *average* specification writer leaves much to be desired in this respect.

DUTIES

The control of drawings, the advising of superintendents and the participation in business phases of practice call for a man of more than *average* attainments. The production of clear, concise and comprehensive specifications is not the accomplishment of the *average* specification writer.

The *average* specification writer may be said to be one who would like to produce good work if he did not have to observe, study and study, study, study while participating in the many activities of professional practice that should receive his attention. It is probably true that the architect hesitates to unload responsibility on his assistant because of mediocre results that may accrue. Specification writing, just as designing, cannot become good without mixing a lot of brains into the work.

The architect who writes his own specifications must devote sufficient time to the work to produce good material but the average architect does not do this.

MISCELLANEOUS CONSTRUCTION ITEMS

by OTTO GAERTNER

Porch and Lattice Posts in Connection with Masonry. Wood porch posts and posts of lattice arbors and entrance canopies of country houses and out buildings often come in contact with stone, brick, and concrete piers and pavements. The specification writer is apt to overlook this condition and not to take the necessary measures of precaution in his specification to properly preserve and hold them. It is seldom that the estimating drawings go into enough detail to show the intended method.

If the posts are not to have bases, the method of setting them remains the same as when the bases occur. There are several ways to do this, but a method that will fasten the post as well as protect it from dampness should be followed. A recess may be left in the top of the pavement, slightly larger than the area of the post and the post set into it after applying an oil or creosote preparation to the post to protect it from dampness. A waterproof mastic or plastic compound applied to the sides and bottom of the recess before setting the post is also a good protection. Sometimes posts are set on top of the masonry after being flashed with copper or lead on the bottom and up six inches, but such flashing should be soldered and fit snugly to be watertight. With this method some kind of strap anchor bolted to or built into the masonry and fastened to the post should be used. If the post has a base, the core is set and the base applied afterward so that the base may be replaced if it should be necessary. If the base is specified to be set in white lead or mastic, especially on the bottom, it will last longer than if only nailed to the post without this precaution.

The posts may also be provided with cast iron shoes built into the masonry or provided with flanges at the sides and bolted to the masonry. Instead of flanges at the sides, a bolt may be placed through the inside of the shoe into the masonry before setting the post into it. It is well to protect the bottom of the post before setting it into the shoe to be sure that dampness can do no harm. Screws may be placed through the sides of the shoe into the bottom of the post after it is set.

If the post is to have a base, perhaps the shoe may be designed as a base. Otherwise the bottom of the post may be rabbeted to finish flush with the shoe if no base is wanted, and if a base is wanted, it may then be applied over the shoe.

Lead Flashings for Shower Compartments in Frame Buildings. Shower compartments are built under varying conditions and with varying resources. Sides and floors may be of tile, glass, marble, or cement plaster. They may occur in places where their rough walls and floors are of masonry in which case the rough walls and floors are waterproofed with felt and waterproof compounds. Sometimes lead floor pans are used in addition. We, however, are concerned with shower compartments in frame buildings with the consequent shrinkage to be contended with. It is this shrinkage which causes most shower compartments to leak either at the floor or at the walls.

When the walls leak and the water gradually works its way downward, the trouble is generally thought to be in the floor although the floor is much more easily made watertight than the walls. The tops of the floor beams should be chamfered, wood strips applied to the sides of the beams, and loose fitting boards resting on the strips should be placed between the beams. These boards should be covered with several inches of concrete to at least the level of the tops of the beams. The top of this concrete should be smooth and on it should be placed a lead pan covering the entire floor and extending to the rough walls where it should be turned up about twelve inches and soldered absolutely watertight at the corners. At the entrance to the shower there should be a curb at least six or eight inches high and the lead should be bent over its rough construction so that it will be covered by the finish. The floor outlet to the plumbing system must be provided with a flange to make a watertight connection to the lead pan. The lead pan is filled with cement mortar to receive the tile floor or a troweled cement finish.

But the walls are more troublsome. The studs should be covered with galvanized metal lath and plastered with cement plaster extending down into the lead pan of the floor. It is not generally done, but this cement plaster may be treated with a waterproof material to keep the water from leaking through and to force it to find its way into the pan. This material must be one that will act as a bond coat to hold the cement mortar for the wall finish. If this waterproof compound is not used the finish is applied directly to the cement mortar on the metal lath. But there is where the difficulty comes in. Settlement and shrinkage may cause the cement mortar to crack. It generally does so at the corners causing the joints in the tile to open or in case of a cement finish the cracks will extend through it. Therefore it is very important to provide a flashing at the corners, the flashing being of lead extending high enough to protect the wet part of the walls, extending about eight inches each side of the corners and extending down into the floor plan. This flashing should be behind the metal lath and should be punctured as little as possible. Water leaking through the finish will find its way to the flashing and follow it downward into the floor pan instead of following the studding downward behind the floor pan so that it will appear in rooms below or, if the amount of water is small so that it will decay the framing. Compartments are often built in this way with a cement finish for the walls. This can be enameled if desired. The lead of the floor pan where turned over the curb, should be covered by a marble sill or by metal lath and a cement finish.

Covering of Soil Pipes.

In expensive residence work soil pipes from bathrooms above often must run downward in partitions or walls forming main rooms. In such cases the specifications should include provisions for deadening the disagreeable noise of water rushing down the inside of the pipe especially at such times when the toilets are flushed or bathtubs are emptied. This may be done by wrapping the pipe with at least a one inch thick layer of hair felt securely tied on. In addition to such wrapping the pipe may be boxed in with wood. If a wood box is used the wrapping may be omitted and instead the space between the outside of the pipe and the inside of the box may be well filled with mineral wool tightly packed. Filling this space with sand or ground cork is not so good, as vibration will gradually make it more compact so that it will settle to the bottom of the box leaving the upper part of the pipe without any insulation except for the box. Such granular filling may also sift through joints, knotholes, or other imperfections in the box, defeating its purpose.

In connection with this it may be necessary to include in the specifications provisions to fur out on the studs to accommodate the thickness of the pipe and boxing unless the partition or wall in which the pipe occurs is thick enough to accommodate it. Also, in case wood lathing is used, there may be no key behind such lath where it passes over the boxing; or if the boxing or the pipe projects slightly it may be necessary to cover them with metal lath so that the plaster at the place may be made thinner than where the wood lath is used so as to bring it to the same surface throughout.

PUBLICATIONS OF INTEREST TO THE SPECIFICATION WRITER

Any publication mentioned under this heading will be sent free, unless otherwise noted, upon rqeuest, to readers of Pencil Points *by the firm issuing the publication. When writing for any of these items please mention* Pencil Points.

Wheatley Tiles.—Portfolio of color plates showing application of Faience Tiles to floors, walls, chimney pieces, etc. Plates showing a large variety of tile inserts in polychrome. Stock mouldings in any color. 10 x 12. The Wheatley Pottery Co., Cincinnati, Ohio.

The Glass Lining.—Magazine containing items of interest in connection with various types of buildings. Vol. I, No. 1 covers a modern milk plant and contains much data which would be useful in equipping modern farm buildings, etc. 8½ x 11. 20 pp. The Pfaudler Co., Rochester, N. Y.

Letters To and Fro.—A booklet profusely illustrated in color presenting much useful information in attractive form concerning modern house heating, a subject sometimes regarded dull made interesting by its unusual and human treatment. 36 pp. 7 x 10. Burnham Boiler Corporation, Irvington, N. Y.

Macbeth-Evans Lighting Glass.—Catalog No. 128. This attractive brochure, just off the press, illustrates with a wealth of color plates a line of lighting glassware applicable to all types of buildings. Complete specification data, thumb nail drawings of interiors. All completely indexed. 56 pp. 8½ x 11. Macbeth-Evans Glass Co., Illuminating Engineering Department, Charleroi, Penn.

The Greenhouse Beautiful.—Catalog with color plates showing greenhouses of many types, from the largest to the smallest with specifications, details of construction, etc. 40 pp. 8½ x 11. The Foley Greenhouse Mfg. Co., Forest Park, Ill.

The Evanston Soundproof Door.—Data sheet with sectional drawings and technical data of value to the architect and specification writer. Standard filing size. 8½ x 11. Irving Hamlin, 716 University Place, Evanston, Ill.

The Twentieth Century Method of Waste Disposal.—Portfolio for the architect's filing cabinet. Complete drawings of incinerator installations for various types of buildings. Specification and engineering data. 8½ x 11. The Goder Incinerator Corp., 323 North Michigan Blvd., Chicago.

Eye Comfort.—Monthly bulletin on the subject of modern lighting equipment. Volume X, No. 3 deals with libraries and churches. Curtis Lighting, Inc., 1122 West Jackson Blvd., Chicago.

20-40-20.—Booklet recently published dealing with a new paint formula with a special reference to outside work. New Jersey Zinc Co., 160 Front St., New York City.

Standard Specifications for Southern Yellow Pine Lumber.—1924 Edition. Useful booklet to all handling or specifying lumber. Handy pocket size. 72 pp. Southern Pine Assn., New Orleans, La.

Norton Floors.—Booklet dealing in an interesting way with Non-Slip Treads showing many applications in modern buildings with especial reference to harmonious decorative effects. Norton Company, Worcester, Mass.

Sanitary Equipment for Kitchens and Bathrooms.—Catalog No. 10, medicine cabinets, kitchen cabinets and a variety of space saving sanitary units for the modern home, club, hospital, hotel, etc. Specifications and detailed drawings. Standard filing size. Majestic Steel Cabinet Co., 4223 Belleplaine Ave.., Chicago.

How to Prevent Scalding and Repair Troubles in Showerbaths.—Interesting booklet showing how to avoid trouble with shower equipment. 20 pp. 8½ x 11. The Powers Regulator Co., 2720 Greenview Ave., Chicago.

Colormix.—Data portfolio for the architect's file, profusely illustrated with color plates treating especially of the flooring problem in connection with modern buildings. Specifications, layouts, detail drawings, etc. 16 pp. The Master Builders Co., Cleveland, Ohio.

Truscon Metal Lath Data Book.—Handbook covering subject indicated. Many full page detail drawings and specifications covering various types of work. 48 pp. Standard filing size. Truscon Steel Co., Youngstown, Ohio.

Folding and Accordion Door Hangers.—Booklet with detail and sectional drawings and full data covering this line of special hardware. 6 x 9. The McCabe Hanger Mfg. Co., 426 West 25th St., New York City.

Handbook of Fireproof Construction.—2nd revised edition. Standard construction details, tables of safe loads, etc. 40 pp. 8½ x 11. Concrete Engineering Co., Omaha, Neb..

Novelty Boilers.—Booklet 77-A covering complete line of heating specialties, etc. Valuable data for the specification man. 32 pp. Abram Cox Stove Co., American and Dauphin Sts., Philadelphia, Pa.

The Dunham Handbook No. 214.—Covers subject of radiation and all other matters pertaining to the modern heating plant. Sectional drawings and typical layouts. Much engineering data. Handy pocket size. 144 pp. C. A. Dunham Co., 230 E. Ohio St., Chicago, Ill.

Architectural Specifications.—Complete specifications on exterior and interior finish coating, structural coatings, cement coatings, shingle stains, floor and wall finishes, enamels, varnishes, etc. 32 pp. 8½ x 11. The Glidden Co.., Cleveland, Ohio.

Lighting Bulletin.—Booklet illustrated in color showing types of units for various uses. Tables, prices, chart for calculating illumination required. 8 x 10½. 30 pp. Edwin F. Guth Co., St. Louis, Mo.

International Casements.—Attractive booklet on subject of windows for homes of distinction and charm. Illustrations of excellent English and American domestic architecture, drawings and photographs, interiors and exteriors. 24 pp. 8 x 10. International Casement Co., Jamestown, N. Y.

The Kernerator.—Covers disposal of rubbish and other waste in residence and apartment buildings. 40 pp. 6 x 9. The Kerner Incinerator Co., 1003 Chestnut St., Milwaukee, Wis.

Published by the same firm, The Sanitary Disposal of Waste in Hospitals, also Blue Prints with Complete Instructions as to layouts for all types of buildings.

Historic Mahogany.—Brochure showing many beautiful designs of pieces of furniture done in Mahogany, Chippendale, Hepplewhite, Sheraton, and in the Mahogany of Colonial Days in America are shown. Mahogany Association, 1133 Broadway, New York City.

Architectural Varnishes, Stains, Fillers and Enamels.—Specification for all classes of work. Recommendations for standard and unusual finishes. 20 pp. 8½ x 11. Standard Varnish Works, 445 Fourth Ave., New York City.

Atlantic Terra Cotta Monthly Magazine for Architects and Draftsmen, Volume 7, No. 2, dealing with the della Robbia field of today. Eight full page plates, detail drawings showing construction and flashing of Gothic canopy, cornice, etc. Atlantic Terra Cotta Company, 350 Madison Avenue, New York City.

Clinton Electric Welded Fabric.—Technical booklet dealing with floor and roof slab construction. Sectional drawings, tables of loads, and much other useful information. 48 pp. Wickwire Spencer Steel Corporation, 41 East 42nd St., New York City.

Rubberstone Tile Flooring.—Data sheet with detail drawings and specifications on the subject of modern flooring. 8½ x 11. Rubber Stone Corporation, 1400 Broadway, New York City.

Truscon Maintenance Data Book.—As the name implies this book deals primarily with the maintenance problem covering painting, varnishing, enameling, waterproofing, the treatment of concrete floors, and many similar problems. For convenience it is arranged under the following headings:—Exterior, Interior, Floors, Basements, Roofs. Fully illustrated with charts and photographs. 100 pp. 8½ x 11. The Truscon Laboratories, Detroit, Michigan. Price $3.00 per copy.

A Free Employment Service for Readers of Pencil Points

(*Other Items on Pages* 98 *and* 114)

Drafting Work to be done at home wanted from New York architect or builder. Graduate with 10 years' experience. Box 60-C, care Pencil Points.

Architect, H. T. Hicks, Welch, West Virginia, has an opening for a good architectural draftsman, college graduate, familiar with layout of structural steel.

Harvey & Clark, West Palm Beach, Florida, want a first class draftsman. In applying state experience, salary expected and length of guarantee required.

Junior Draftsman desires position. Fourth year student at Cooper Union. Worked one year for architect and two months on lettering job. Box 62-C, care Pencil Points.

Junior Draftsman desires position in New York. Two years' experience, 4 years' training. Wm. Adinolphi, 246 East 119th St., New York City.

Junior Draftsman, Columbia, Beaux-Arts student seeks permanent position where he can develop. Can work from sketches, make perspectives, be generally useful in office. Three years' experience. Box 64-C, care Pencil Points.

Architectural Designer, skillful renderer, extensive experience all kinds of buildings, interiors and elevations, especially, will do special work for first class firm. Highest references. Box 63-C, care Pencil Points.

German Architect, 42 years old, single, 12 years' experience, eight months in this country, speaking a little English, graduate technical school and 2 years high school in Germany, good in drawing and concrete, wishes an opportunity to begin in costruction office or in architect's office in permanent position. $25.00 per week. Has good references, testimonials and designs. Oscar Griska, 2638 North Halsted Street, Chicago, Ill.

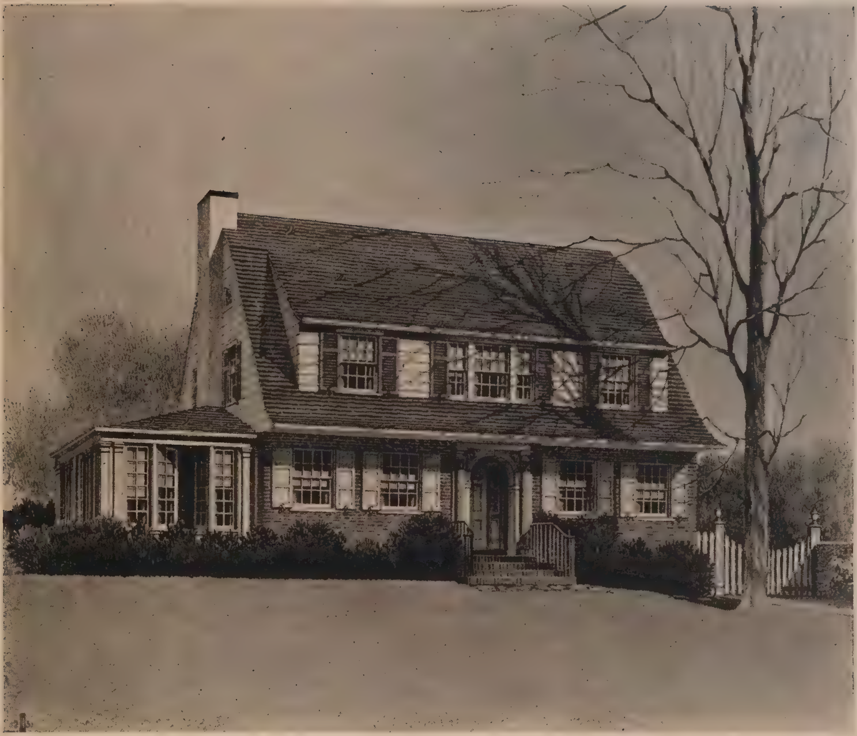
Junior Draftsman wishes employment in architect's office in New York City. Two years' experience on residences, stores, garages. Columbia University Extension student for 3 years. Box 65-C, care Pencil Points.

Position as junior draftsman wanted. Three years' experience in building construction doing general work and fifteen months as draftsman with New York City architect. Box 66-C, care Pencil Points.

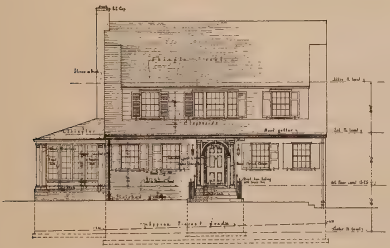
Position Required in New York City as architectural draftsman by young lady having had 4 years' experience. Graduate Armour Institute. Just returned from ten weeks of architectural study in Europe. References. Box 67-C, care Pencil Points.

Junior Draftsman desires position with New York City architect. Has studied three years at Pratt Institute and wants experience. Box 68-C, care Pencil Points.

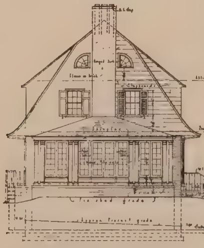
Draftsman living in New York City desires to connect with local architect. Has had 6 years' drafting experience. Graduate of Armour Institute of Technology. Box 69-C, care Pencil Points.



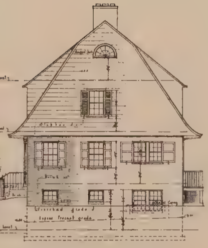
Rendering by *Lawrence C. Licht.*



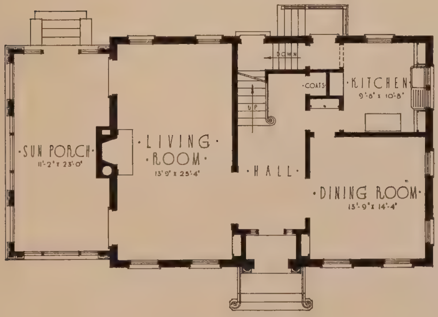
• SOUTHEAST • ELEVATION • BROAD AVENUE •



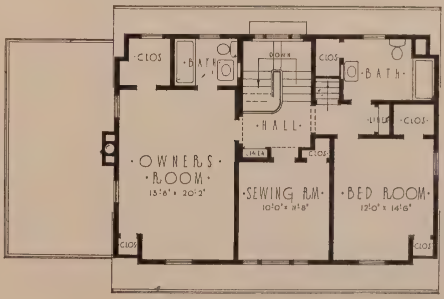
•SOUTHWEST • ELEVATION•



•NORTHEAST • ELEVATION•

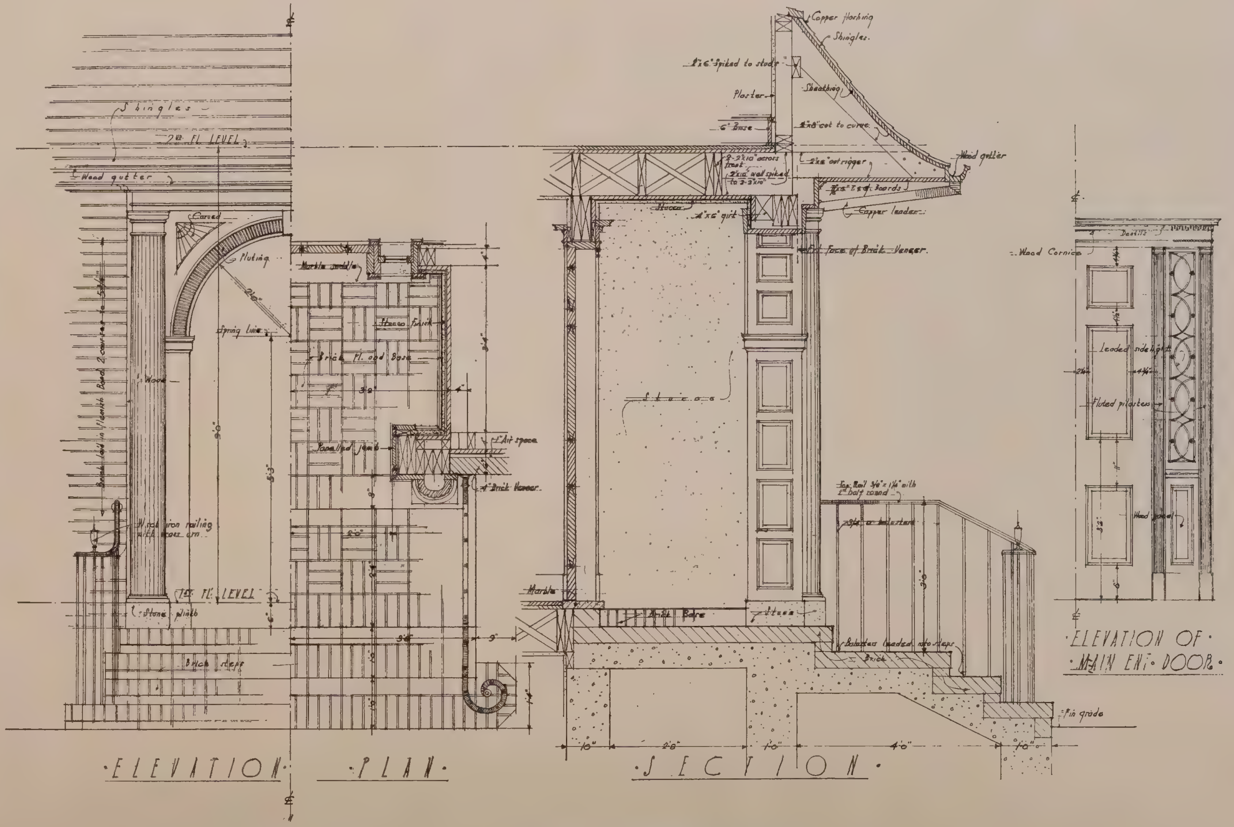


First Floor Plan.



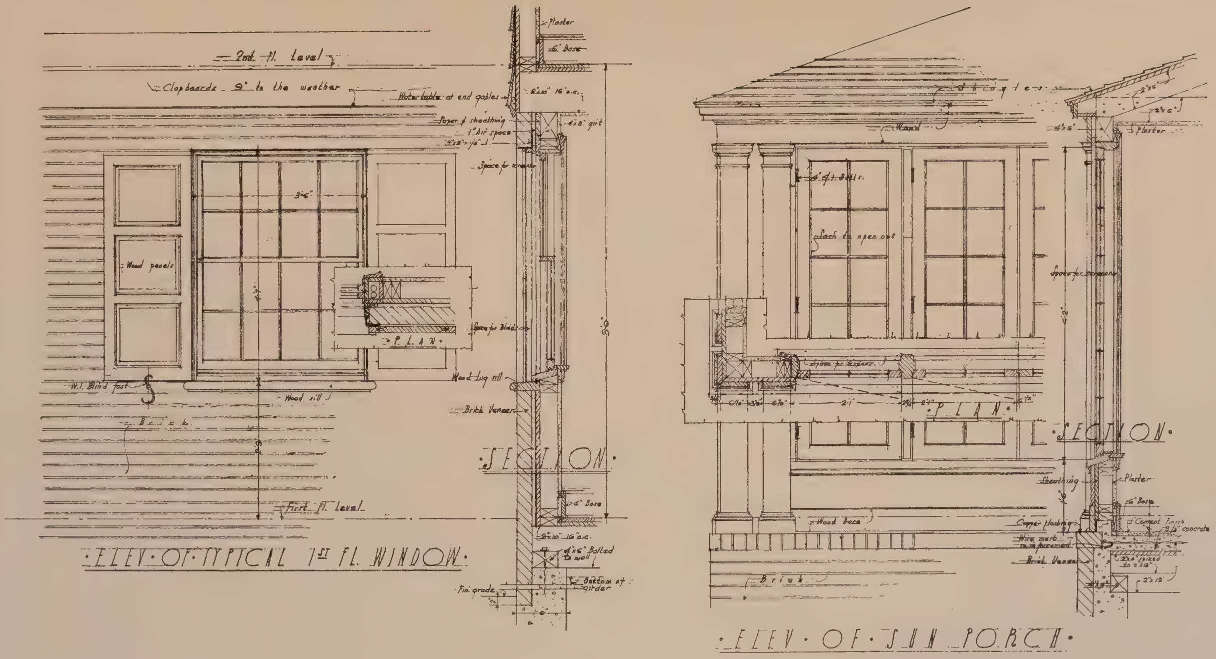
Second Floor Plan.

House for J. A. Thomson, Esq., Englewood, N. J., Lawrence Licht, Architect.



Details of Construction.

House for J. A. Thomson, Esq., at Englewood, N. J., Lawrence C. Licht, Architect.



Details of Construction—House for J. A. Thomson, Esq., at Englewood N, J. Lawrence C. Licht, Architect.

A Free Employment Service for Readers of Pencil Points

Advertisements covering "draftsmen wanted" and "positions wanted" will be printed in this column free of charge. Such advertisements will be printed in one issue only and limited to thirty-five words. On subsequent insertions of the same advertisement a charge of 5 cents a word will be made.

Architects requiring the services of draftsmen, and draftsmen desiring positions, are invited to communicate with this office stating full particulars as to position, qualifications, salary, etc. In addition to printing these wants in Pencil Points they will be posted on The Bulletin Board in our office.

Draftsmen in New York and vicinity desiring positions are invited to call and inspect The Bulletin Board and also post notices offering their services.

Information regarding positions will be forwarded, on request, to draftsmen and architects residing in other cities.

In undertaking this service we accept no responsibility other than transmitting the information in the manner above stated. There is no charge for this service.

To avoid confusion we request immediate notification when the position is filled or obtained.

THE PENCIL POINTS PRESS, INC.,
Phone Madison Square 5940, Dept. E. 19 East 24th St., New York

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Somewhere in Greater New York is an architect with whom I hope to associate as his personal representative, his designer and executive. My credentials are satisfactory. Academic, foreign travel and practical training. An experience of 18 years in all classes of architectural work. Diplomatic. Adaptable personality. Can "Sell Architecture" and meet clients. As chief designer have had charge of from 6 to 50 men. Box 711, care Pencil Points.

Furniture Manufacturer in Grand Rapids, Michigan, wants young man with architectural training to study and learn furniture designing. Good salary and prospects for the right man. Apply Robert E. Walton, Room 708, 152 West 42nd St., N. Y. C.

Graduate Engineer, Roumanian, three years' experience in America, desires position as draftsman with architect or firm engaged in any phase of building. Salary secondary. Edmund O. Weisse, 336 East 96th St., N. Y. C.

Draftsman, 35 years old, experienced in architectural decoration and general applied design seeks position that will largely utilize this experience. New York or vicinity only. John Gleason, 51 Hicks St., Brooklyn, N. Y.

Designer and Renderer, 12 years' experience, 5 years' European training seeks position. Box 50-C, care Pencil Points.

Young Man seeks position as tracer in good architectural office. Can make individual sketches and lay out good mechanical detail. Box 51-C, care Pencil Points.

Designer and Renderer, A. I. B. A. and Paris diplomé. Renderings in all mediums. Specialist in English Domestic Architecture. Own studio. Modest fees. Box 52-C care Pencil Points.

Wanted Immediately, three capable architectural draftsmen. Must be equipped with sufficient experience and necessary training which will permit them to carry on and produce a complete set of working drawings, details and routine work, without constant supervision of the Chief Draftsman, except in consultation with him or members of firm. Salary according to man's proven industry and ability. Location, Virginia. Box 53-C, care Pencil Points.

Junior Draftsman. Bushwick Evening Schooling and attending Cooper Union Night School wishes position in architect's office. William De Angelo, 12 Ocean Place, Brooklyn, N. Y.

Architectural Draftsman wants position. Apartment houses, residences, stores, garages, etc. Five years' European and two years' American experience. Salary $35 per week. Box 54-C, care Pencil Points.

Foreign Service Anywhere Wanted, Draftsman and designer, 25 years old, college graduate, four years' practical experience. Lived in Europe and Near East two years. Adaptable, congenial. References. Paul W. Copeland, Box 98, Longview, Wash.

Construction Engineer and architect's superintendent or clerk of works open for engagement. Just completing the finest and largest block of office buildings in State of Wisconsin for Public Service Corporation. Thorough knowledge of construction and superintendence. Twenty-five years' experience. Registered professional engineer. First class references. Go anywhere. Address Architectural Engineer, 748 Parker Ave., Beloit, Wis.

Architectural Draftsman, 4 years' experience on country and city houses, churches and apartment houses, capable of making complete plans from sketches wishes position in Philadelphia or Baltimore. Salary $35 per week. Box 55-C, care Pencil Points.

Junior Draftsman, 27, wishes employment with architect in New York City. Best of recommendations, $35 per week. Box 56-C, care Pencil Points.

Architectural Designer and draftsman wants position evenings and Saturdays. Good knowledge in design, working drawings, ¼", ¾" and perspective drawing and renderings. Box 57-C, care Pencil Points.

Experienced high grade designer for lighting fixtures, familiar with all styles and periods of architecture. Must be able to read plans and elevations and prepare scheme for any project. Necessary to detail in full size for factory purposes. Victor S. Pearlman & Co., 533 S. Wabash Ave., Chicago, Ill.

Couple of Good Designers wanted having had at least ten years' experience. Work mostly on hospital buildings. New York City firm. Box 59-C, Pencil Points.

Young Man, 22, attending architectural school evenings desires position as Junior for tracing, lettering, etc. One year experience. Louis A. Roy, 2119 Beverly Road, Brooklyn, N. Y.

Junior Architectural Draftsman, 17, having had 2 years' architectural study, wishes position in office where he can secure more knowledge of architectural drafting or construction work. John S. George, 580 East 141st St., New York City.

Junior Draftsman desires position with New York architect where he can develop. 3 years Pratt Institute. C. H. R., 3883 Bedford Ave., Brooklyn, N. Y.

Specifications Neatly Typed by one experienced in architect's work. M. Bishop, 15 East 40th St., New York City, Telephone 10417 Vanderbilt.

Junior Architectural Draftsman desires position with architect in New York City. 3 years' experience, excellent references. Student at Columbia University Extension. Salary $25.00 week. Herbert Rosenberg, 1418 Prospect Ave., Bronx, New York City, phone Kilpatrick 7580.

Young Man desires opening in architect's office with chance for advancement. Have had four years' experience. Donald C. Smith, Box 313, McMinnville, Tenn.

Architectural Draftsman, Beaux-Arts student, desires position. Apartment house work, sketching and rendering preferred. Moderate salary. J. B., care R. Fund, 216 E. Houston St., New York City.

Young Man, 18, wishes position in architect's office. Graduate of the Hebrew Technical Institute. Ambitious and willing to work hard. Salary secondary. Hyman Goldsmith, 34 Varet St., Brooklyn, N. Y.

Architect—Business Getter—desires position or partnership with an established architect in New York City. Box 61-C, care Pencil Points.

Young Lady desires position as draftsman in architect's or interior decorator's office, New York City. Three years' training at the New York School of Fine and Applied Arts. Barbara Bird, 24 Brewster Ave., Ridgefield Park, N. J.

(*Other Items on Pages* 94 *and* 114)

PENCIL POINTS

VOLUME V NOVEMBER 1924 NUMBER 11

THE DESIGNER AND THE "PRACTICAL MAN."

THE habit of regarding the architectural designer as a man who is not practical and of looking upon the "practical man" as one who has little or no appreciation of design is bad, though it agrees with the facts in far too many cases. This habit is bad because it tends to one-sided development, through sharply dividing the men in architectural offices into the two classes that a well-known architect used to call "the long haired department" and "the short haired department."

Specialization is necessary but it should not be carried to such a point in any man engaged in architectural work as to leave him without a well-rounded knowledge of all sides of practice and without well balanced development. It is natural and easy to keep a man at the kind of work he does best, but it does not develop the man symmetrically—this is not good for the man or the profession.

Granted, that an attempt to make all architectural men equally proficient in all branches of the work would be unwise and futile, that each man should be developed in the direction of the greatest aptitude, the fact remains that each man should have an intelligent grasp of the main facts concerning all branches of the work outside of his own specialty. With such knowledge he is able to co-operate intelligently with his colleagues, and his work is the more interesting to him because he is able to see it in relation to the whole. A man with such an understanding of architectural work is a more capable employee than the man who has specialized without having sufficient preliminary experience—he is a better man for the architect who employes him, also he is by far a better man when he enters upon architectural practice for himself.

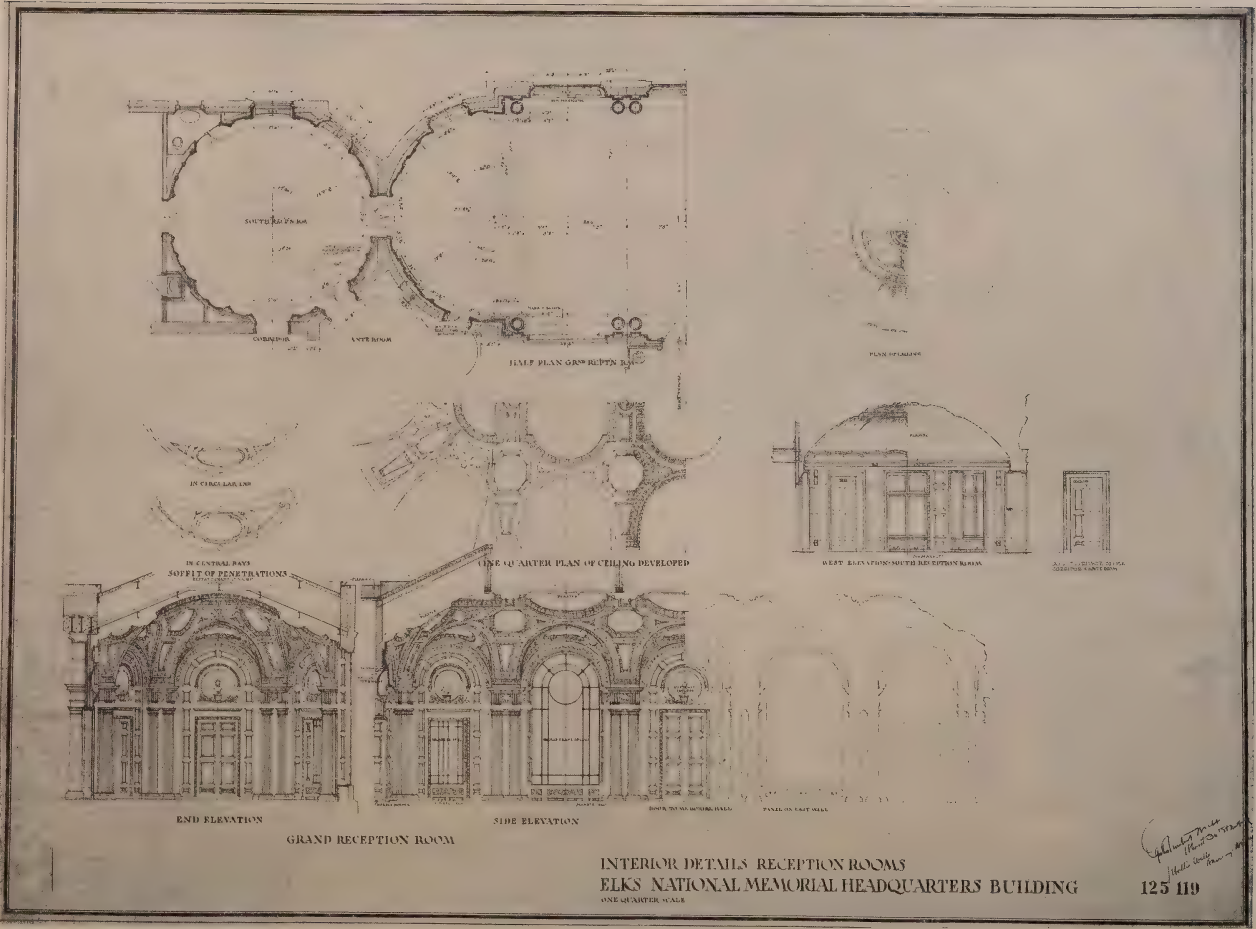
The fact must not be lost sight of that a man who is a good designer is a practical man in the sense that he knows how the things he draws will build—there may be innumerable practical things that he does not know and that some other man in the organization does know, but the good designer knows enough of the practical side so that his designs will be free from any serious practical faults, and he is very likely to know enough of the practical side to be able to appreciate the value of the knowledge of the man who has specialized on the practical side.

The able "practical man," for his part, is a man who can appreciate the intention of the designer and help carry out that intention sympathetically, for the designer's work may very easily be spoiled in execution if it is not carried out with an appreciation of its character. The specification writer and the man on the job have more to do with the success of a building from the aesthetic standpoint than many people realize.

Often it is not until a man hangs out his own shingle as an architect that he becomes fully conscious of the desirability of a wide knowledge. Of course if he is able to start with a full organization including men who have specialized in the different parts of the work, he may not experience any difficulty. But usually when a man enters practice for himself he finds that he has to take hold of sides of the work that he has had little to do with in his years of employment as a draftsman, then he has to get down and qualify.

Unfortunately, some men in the profession are never able or fully willing to overcome the handicap of onesided development, and it is these men who give some basis of fact to the popular idea that an architect is either a builder who draws plans or a dreamer who makes attractive pictures of things that are troublesome and costly to build and inconvenient. Though these men are very much in the minority there should be even fewer of them, for the benefit of the profession. There will be fewer of them if the habit of distinguishing sharply between the designer and the "practical man" is discouraged and if specialization without a sufficiently broad preliminary experience is avoided. In this way the architect will have a higher percentage of able employees and the men who enter upon the practice of architecture will find themselves well equipped.

Living architecture, the architecture that is anything more than an exercise in archaeology, must be practical, it must express the needs, the methods of building, the life of its day. Since this is true, the architect, the intelligent draftsman and the student of architecture need to be always alert for practical information. To such men the study of human requirements in relation to architecture as a fascinating pursuit, the behaviour of people in public places and in private homes takes on new interest when viewed from this standpoint, the announcement of an improvement in plumbing fixtures, heating or lighting equipment or in building construction methods or materials is keenly interesting, not in spite of the fact but, because of the fact that they are designers.



Interior Details Reception Rooms, Elks National Memorial Headquarters Building. Egerton Swartwout, Architect.

WORKING DRAWINGS, SCALE DETAILS

BY EGERTON SWARTWOUT

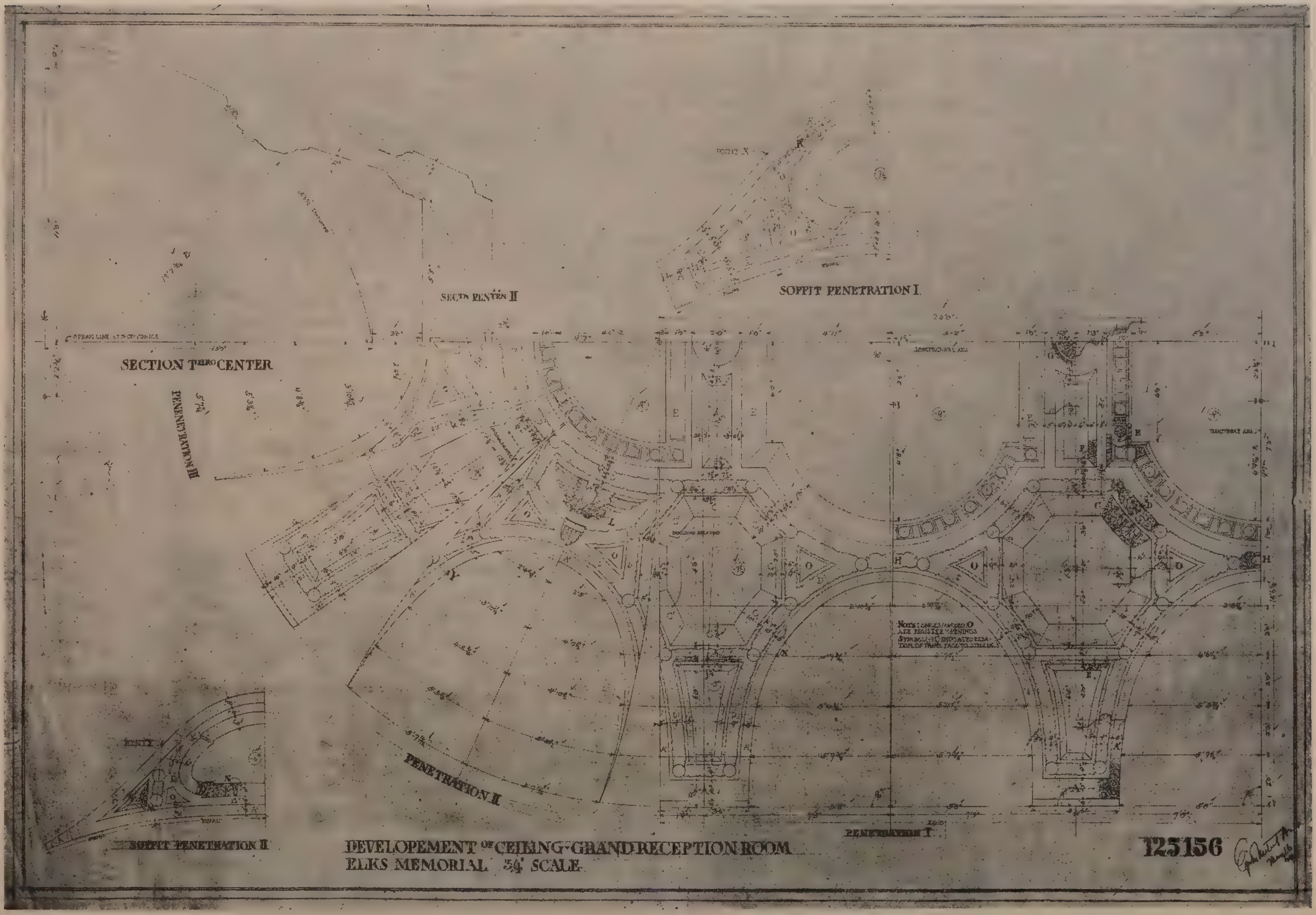
As I remember it, way back in the old days at McKim, Mead and White's, in the roaring 90's, scale details were not considered particularly important, and there were rather few of them made, and when they were made they were on a nice mounted sheet,—their white paper bills were large in those days,—and when we had made them, our interest ceased. They came then into the hands of the tracers, a motly crew of foreigners under the charge of a *pantata* or slave driver, who apportioned the work out to them, as I understand they now do with portions of cloaks and suits in the sweat shops. These slaves laboriously traced everything there was on the board, ink blots, erasures and all, and as most of them could read no English the legends were often weird. I remember a stair on which I had put "DOWN IIR." The II did look something like a "U" so the alien who traced it made it a "U" and naturally thought the next letter must be a "P," and the builder spent a week trying to build a double stair.

Well, we've improved since then, we have recognized that, after all, the print is the thing, and the draftsman makes his own tracings and they are beautifully done and most elaborate. In fact, we've overdone it. The pendulum has swung too far back. There is too much on the drawings; they are confusing. Most draftsmen have forgotten, or are ignorant of, what scale details really are.

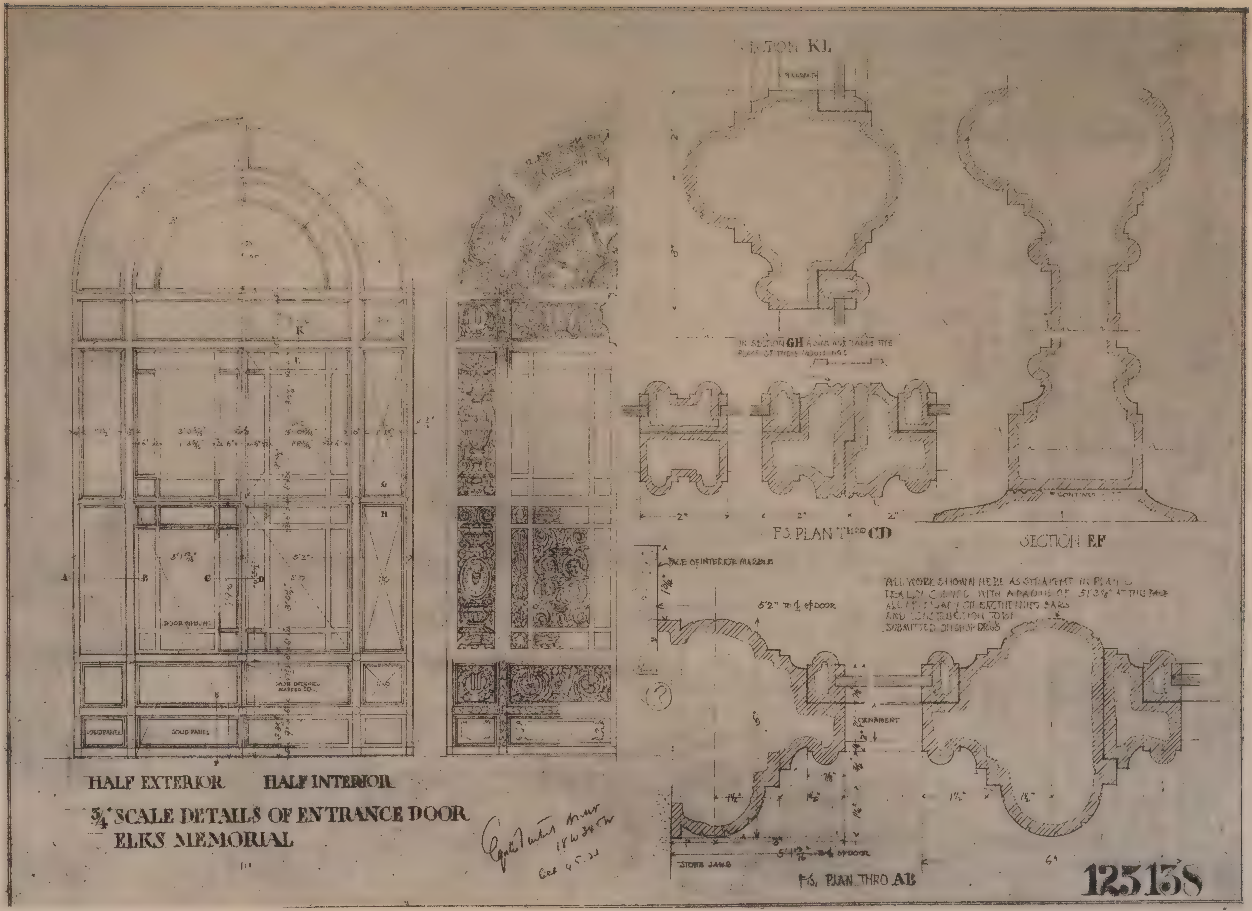
Now, as I see it, scale details, and for the information of the many to whom I am not personally known let me say that I am a draftsman, as I think everyone ought to be who presumes to call himself an architect: I've been making scale drawings myself for thirty-three years, and in that time I've made a good many and I'm still making them, and therefore I speak from experience and not ex cathedra. But to resume, scale drawings are (a) for the purpose of study and (b) for the conveying of information to the builder. These two purposes, (a) and (b), (I rather like to use letters like this with a little circle around them, it gives quite a practical air to one's remarks) are really quite different; the same drawing will not do for both. Most scale drawings that I see nowadays are so complicated and there is so much extraneous stuff on them, that it is entirely out of the question to see the design at all. In our own practice we make the scale drawing for study on tracing paper, pinned down and not stretched very tight. I find that in this way it holds its scale fairly well. Of course all paper will come and go somewhat, but I've found it does it less this way. Suppose for instance, we are studying an order which is shown at eighth on the contract set. Probably some figures are established, the height of the column and the entablature. If the order is over 30 feet or so, we study at quarter, if under, at three-quarter. We adhere with the most minute accuracy to the eighth scale, even using a magnifying glass and scaling off at different places, and lay out the bones of it with the greatest care, to be sure it scales to a fraction of an inch. We study over this in free hand and render it in pencil or charcoal and sometimes rough out some of it full size to be sure of the scale. Then we draw it out very carefully in line with a fairly thin line that can be easily scaled, and establish in figures, all the main divisions of the entablature, the upper and lower diameter, the height of the base and cap, and locate the architrave and frieze faces in relation to the upper diameter. We establish, in figures, the projections of the fascia of the cornice and the corona. This all has to be done sometime and it's much better to do it then when it's all fresh than to pick it up when full-sizing.

When we've finished we know the order as detailed would look, if reduced, exactly like the eighth scale, or, rather, like the design. This drawing is carefully preserved as a record, and using these figures as a basis, and generally tracing over it we make in pencil on white cloth the scale drawing for printing. I find pencil answers quite well enough; it does not make such clear prints as ink, but it's much quicker. We generally make a separate drawing for each trade. For example, if the building is of stone, the drawing referred to above is a basis for the stone shop drawings, so we only show the stone work and the backing, and merely the steel that comes near the stone. "But we figure everything," even figures that seem unnecessary, projection of bases, of caps, offsets from the building line, spacing of balusters, everything. It's much handier to have all these things on one drawing than to look through rolls of full sizes at some future time. I've had people say, "How can you be sure these figures will stand, doesn't it tie up your full sizes?" The answer to that is that these figures have to be fixed sometime. Changing on the full size is dangerous, but if it must be changed, why change it and call attention to it on the full size. I find you rarely have to change it. And in speaking of figures, we always try to give all the figures the shop drawing man may need; it saves time in the end, and makes the checking of the shop drawings much easier. For example, we've done a good deal of circular work with intersections at all sorts of angles. We always figure these things out and draw all circular work developed. It's not much of a thing to do—it sounds harder than it is—the merest smattering of trigonometry and a copy of Kidder is all that is necessary.

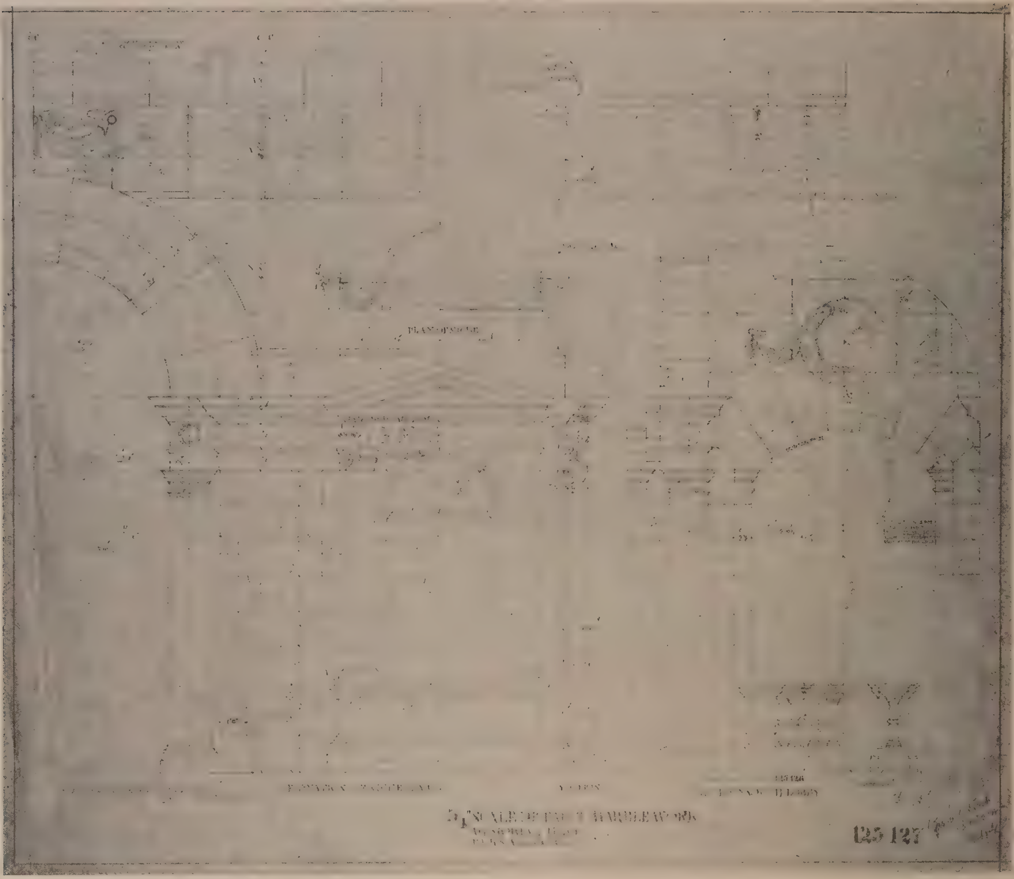
The same method applies to the interior. The interiors on the contract set have been drawn out say at quarter. We generally rough out the full sizes of some of them to fix the scale, and make the drawings for one trade only, unless of course two or



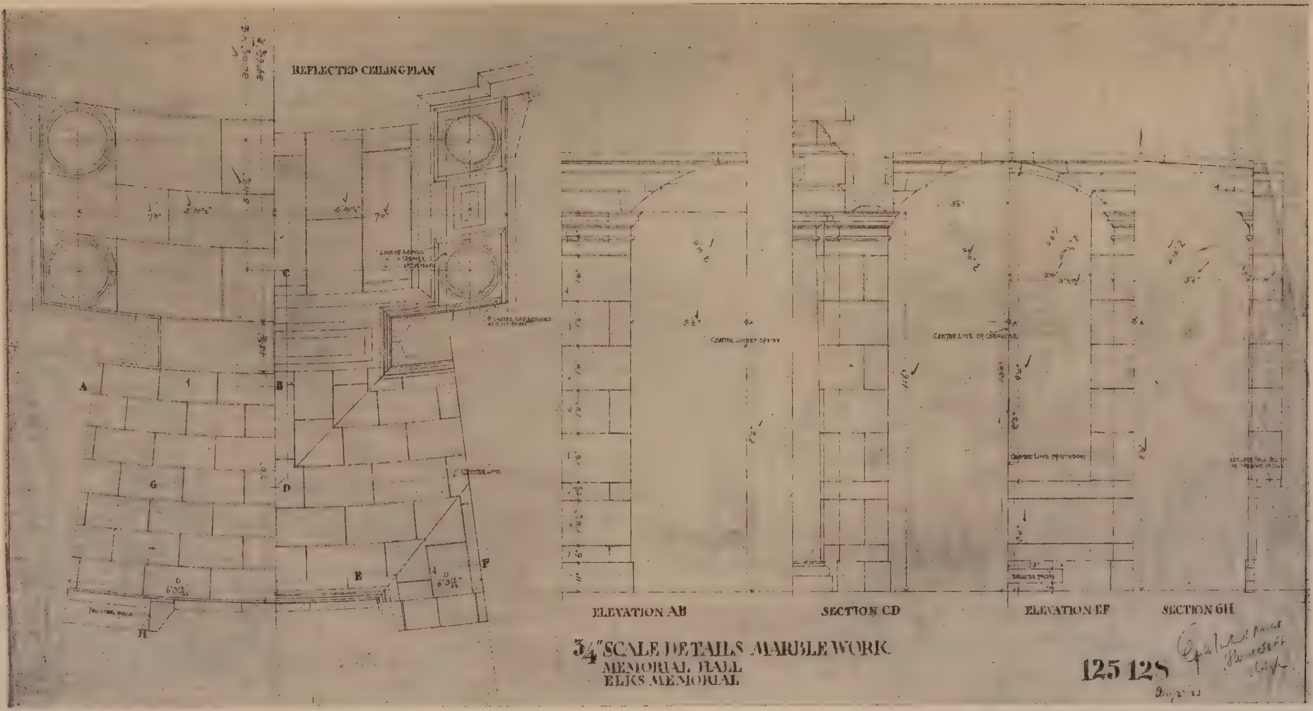
Development of Ceiling. Grand Reception Room, Elks Memorial, Chicago, Ill. Egerton Swartwout, Architect.



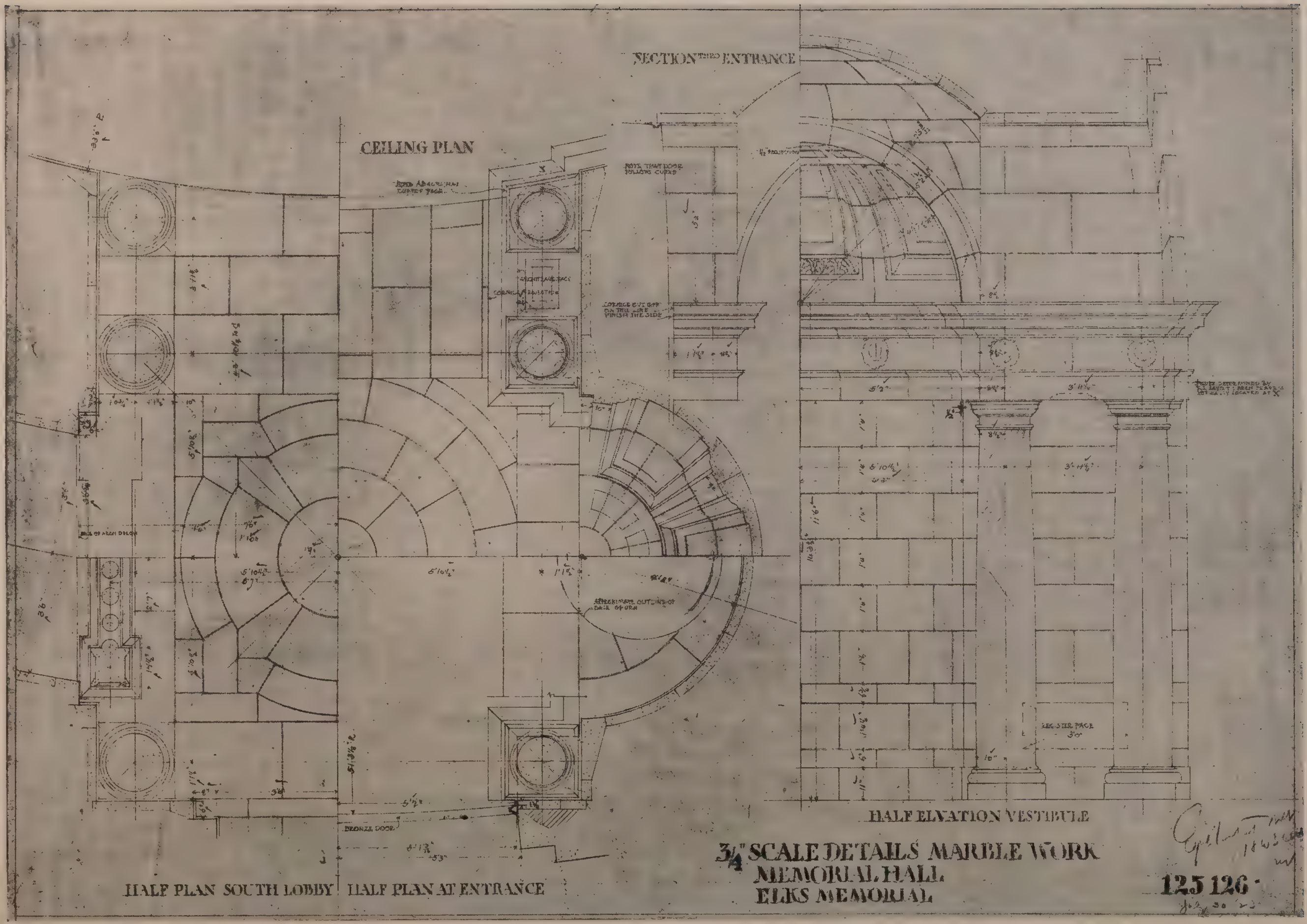
¾″ *Scale Details of Entrance Door, Elks Memorial, Chicago, Ill. Egerton Swartwout, Architect.*



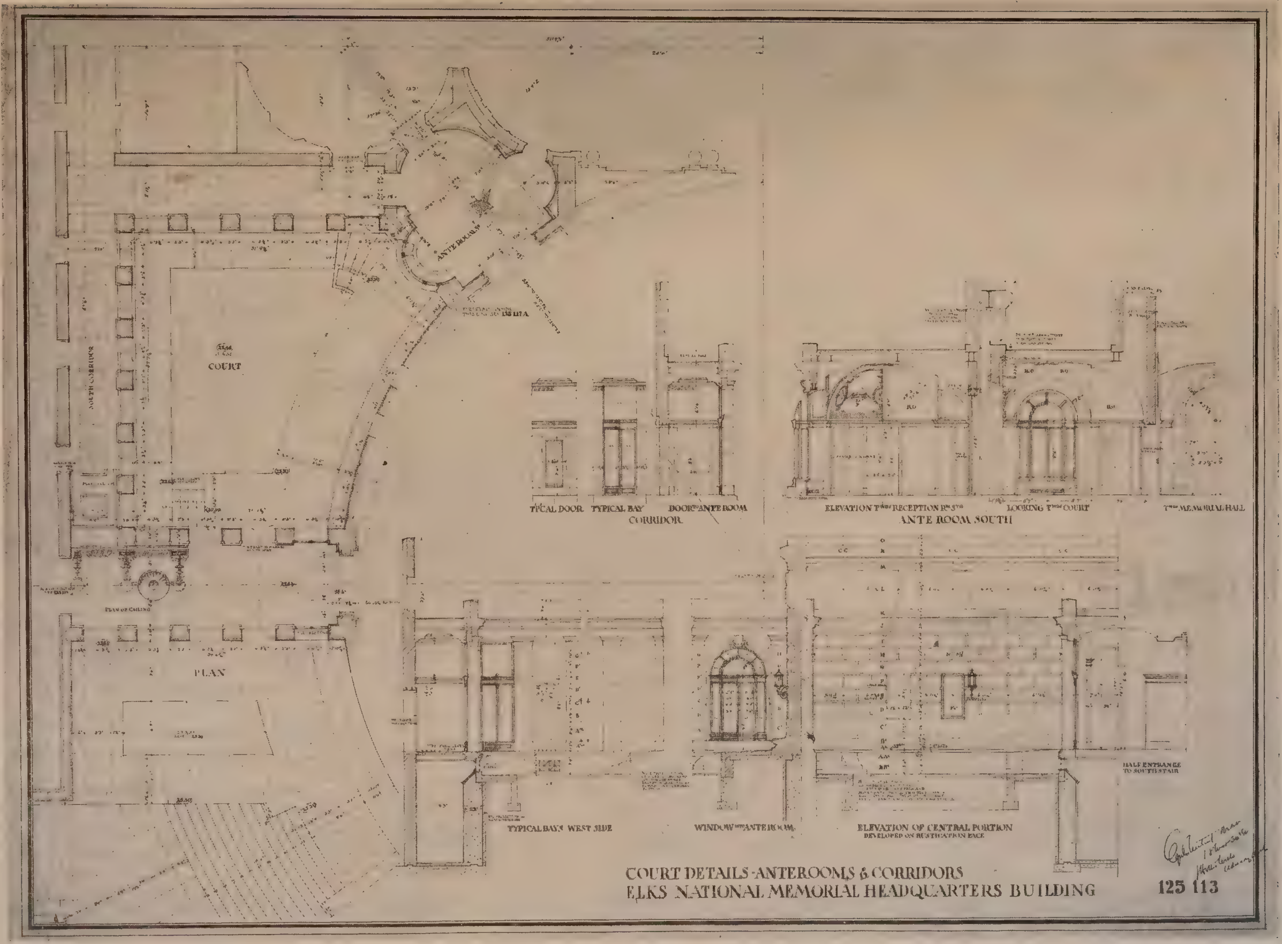
¾" Scale Details, Marble Work, Memorial Hall, Elks Memorial, Chicago, Ill.
Egerton Swartwout, Architect.



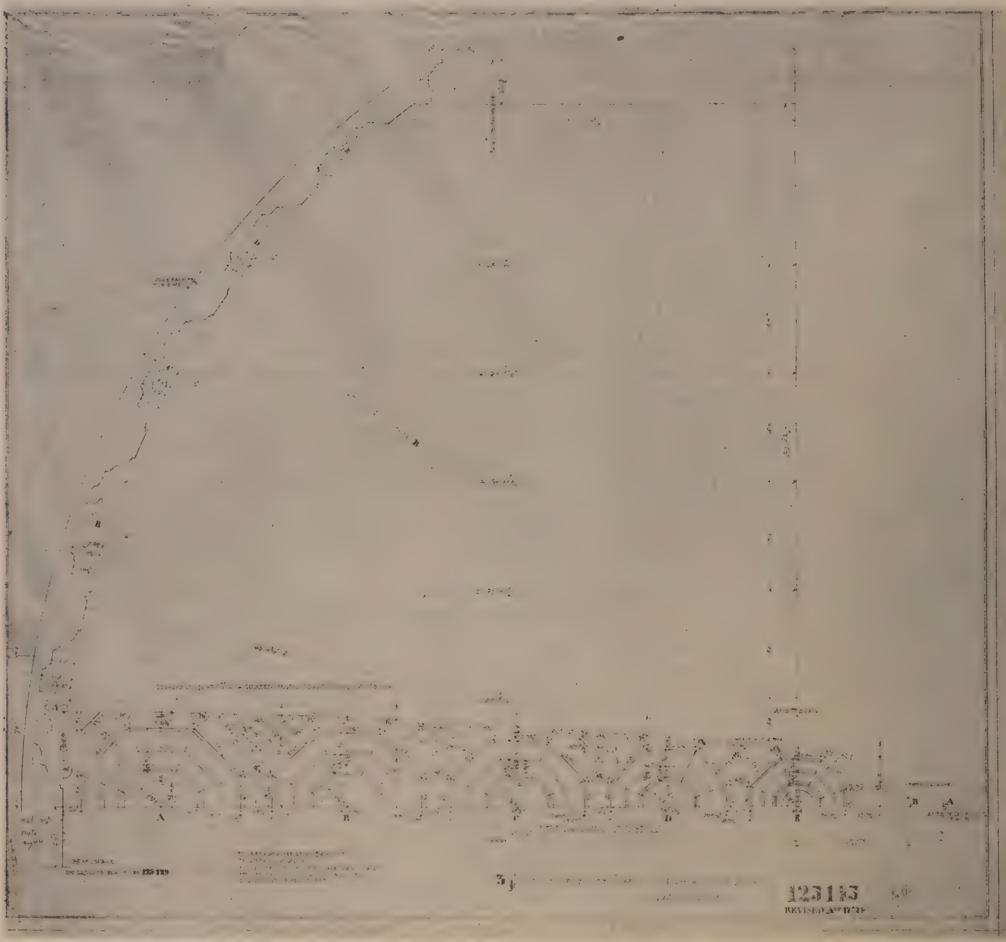
¾" Scale Details, Marble Work, Memorial Hall, Elks Memorial, Chicago, Ill. Egerton Swartwout, Architect.



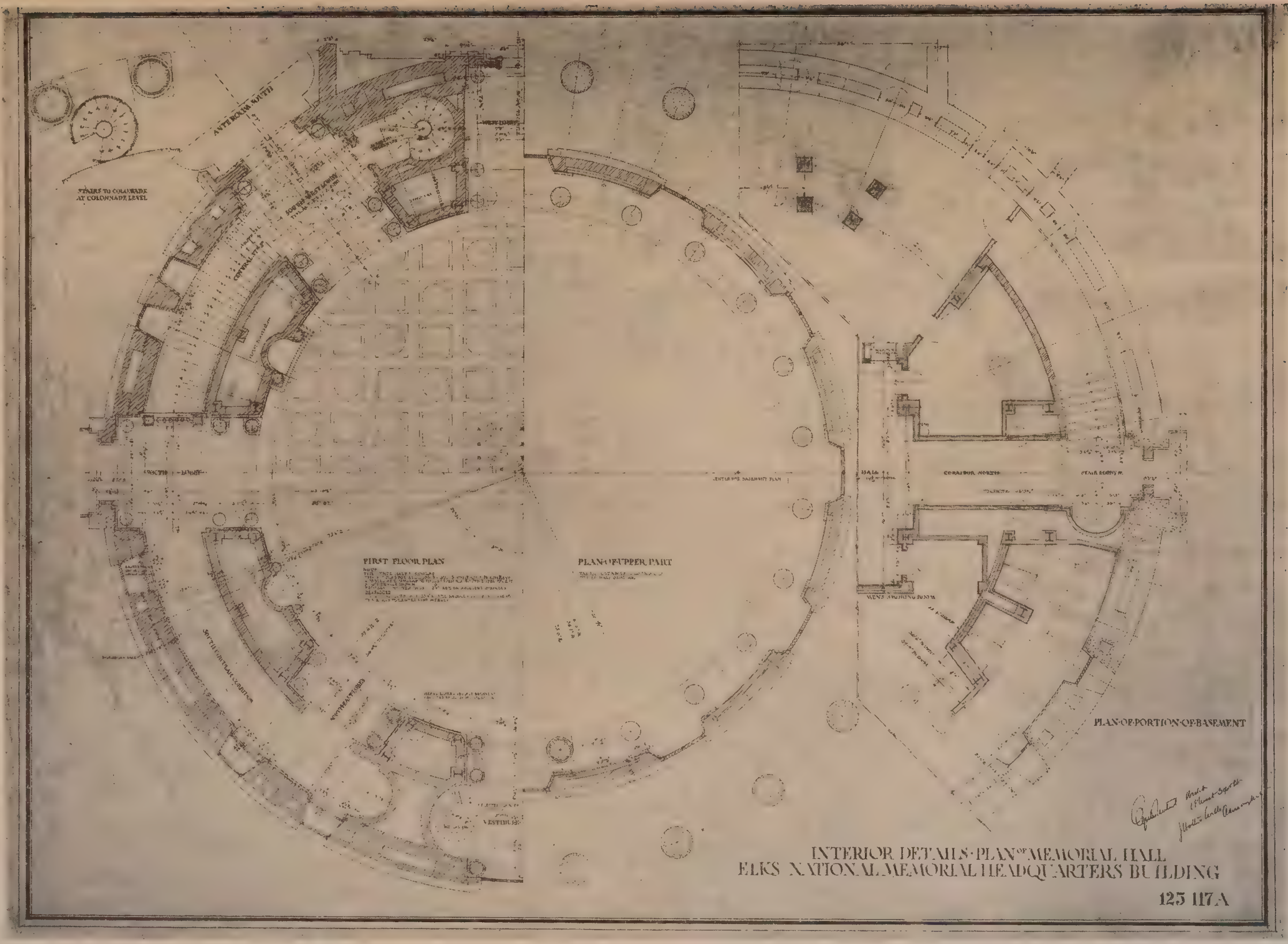
3/4" Scale Details, Marble Work, Memorial Hall, Elks Memorial, Chicago, Ill. Egerton Swartwout, Architect.


COURT
SOUTH CORRIDOR
ANTE ROOM
PLAN
TYPICAL DOOR
TYPICAL BAY
DOOR TO ANTE ROOM
CORRIDOR
ELEVATION TOWARD RECEPTION ROOM
LOOKING TOWARD COURT
TOWARD MEMORIAL HALL
ANTE ROOM SOUTH
TYPICAL BAYS WEST SIDE
WINDOW INTO ANTE ROOM
ELEVATION OF CENTRAL PORTION
DEVELOPED ON RUSTICATION FACE
HALF ENTRANCE TO SOUTH STAIR
COURT DETAILS-ANTEROOMS & CORRIDORS
ELKS NATIONAL MEMORIAL HEADQUARTERS BUILDING
125 113

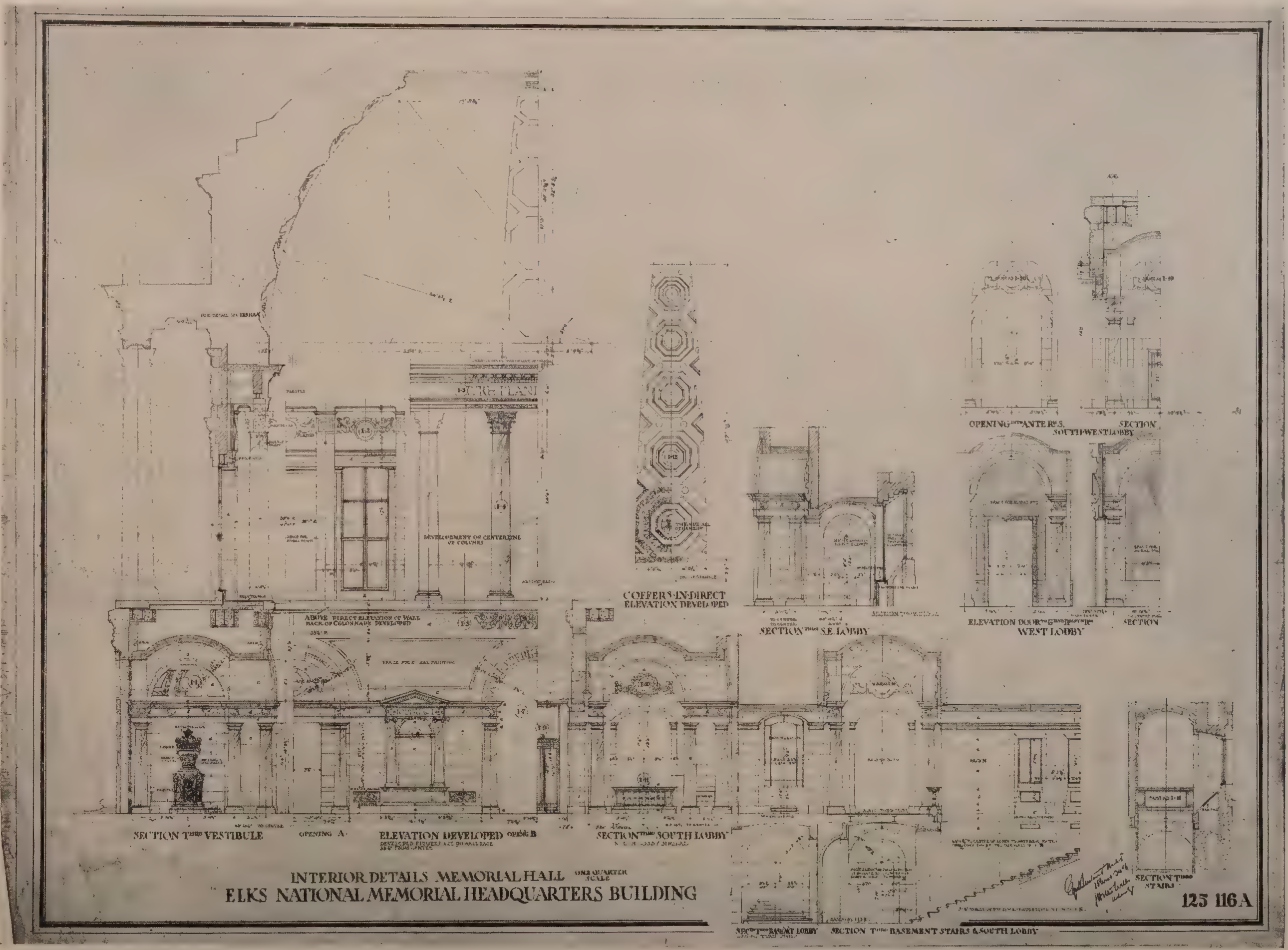
Court Details, Anterooms and Corridors, Elks National Memorial Headquarters Building, Chicago, Ill. Egerton Swartwout, Architect.



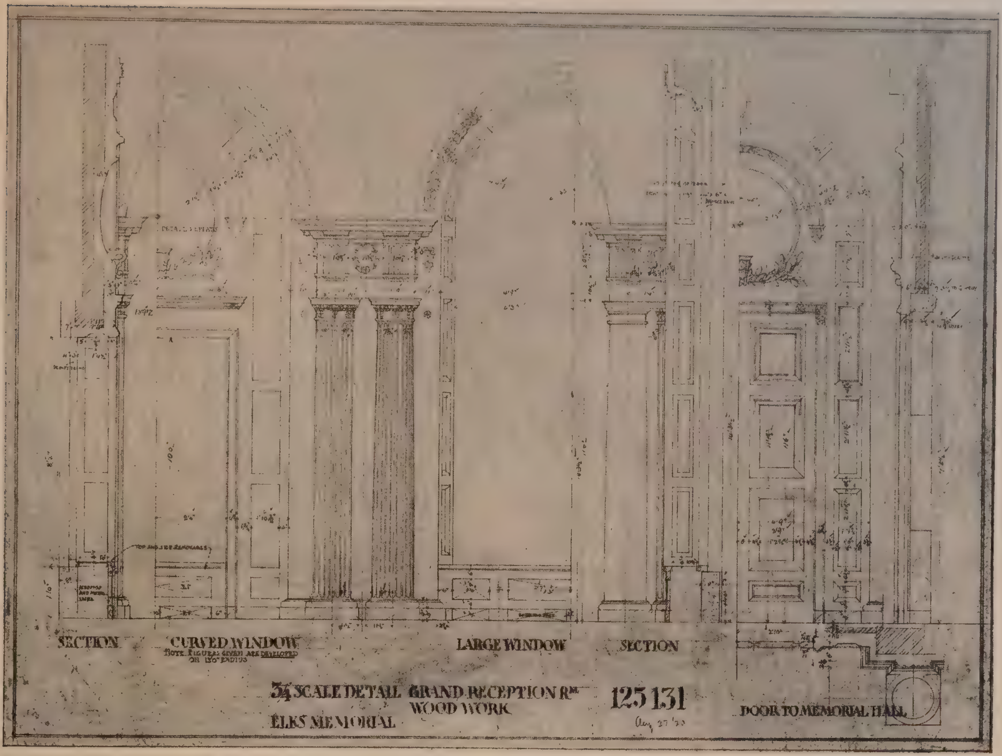
¾" Scale Detail of Coffers, Memorial Room Dome, Elks Memorial, Chicago, Ill.


STAIRS TO COLONNADE AT COLONNADE LEVEL
ANTEROOM SOUTH
SOUTH-WEST LOBBY
CENTRAL STAIR
FIRST FLOOR PLAN
PLAN·OF·UPPER PART
HALL
CORRIDOR NORTH
MEN'S SMOKING ROOM
VESTIBULE
PLAN·OF·PORTION·OF·BASEMENT
INTERIOR DETAILS·PLAN OF MEMORIAL HALL
ELKS NATIONAL MEMORIAL HEADQUARTERS BUILDING
125 117 A

Interior Details, Plan of Memorial Hall, Elks Memorial, Chicago, Ill. Egerton Swartwout, Architect.


COFFERS IN DIRECT
ELEVATION DEVELOPED
DEVELOPMENT OF CENTERLINE OF COLUMNS
ABOVE DIRECT ELEVATION OF WALL BACK OF COLONNADE DEVELOPED
OPENING THRU ANTE RMS.
SECTION
SOUTH-WEST LOBBY
SECTION THRU S.E. LOBBY
ELEVATION DOOR TO 2ND RM. WEST LOBBY
SECTION
SECTION THRO VESTIBULE
OPENING A
ELEVATION DEVELOPED
OPENING B
DEVELOPED FIGURES ARE ON WALL FACE
SECTION THRU SOUTH LOBBY
INTERIOR DETAILS MEMORIAL HALL
ONE QUARTER SCALE
ELKS NATIONAL MEMORIAL HEADQUARTERS BUILDING
SECT THRU BASEMT LOBBY
SECTION THRU BASEMENT STAIRS & SOUTH LOBBY
SECTION THRO STAIRS
125 116A

Interior Details Memorial Hall, Elks National Memorial Headquarters Building, Chicago, Ill. Egerton Swartwout, Architect.



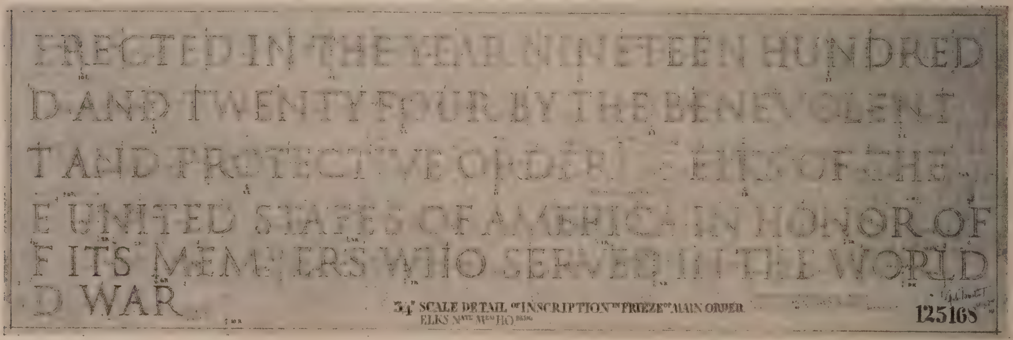
¾" Scale Detail, Grand Reception Room—Wood Work, Elks Memorial, Chicago, Ill.
Egerton Swartwout, Architect.

more trades are so closely tied up that one drawing will suffice. But we show nothing but what the trades need for their work and generally only the finish line,—what is the use of showing terra cotta partitions and backing and structural steel, unless there is some particular and special construction that has to be done, or unless there is some very tight place over a duct or something of the sort,—and we make our scale details fragmentary; no parts are repeated, and the drawings are kept small, not more than 24 x 30, less than that, oftener, than not, and generally making one over the other to save laying out. I've seen scale details that were so big that they were not only unwieldly but impossible to read. I recall one case on a very large building we were doing. The marble subcontractor appeared before the Board to argue about some extras he had claimed and that we had turned down. He made a very impassioned argument and was supported by the general contractor, and there were a couple of lawyers present and a committee from the Senate, for this contractor was a power. The Board was impressed and the Senate leader, a very imposing man, in a long Prince Albert and black Stetson, said "Now, Mr. Architect, what have you to say in reply? Can you answer this honest man?" And I said no, I couldn't, and the honest man swelled with pride and the Senator was pleased and the Board of Commissioners looked pained. I had failed in a pinch. "Senator," I said, "I can't answer that because I can't understand it. This honest man is talking about one side of the chamber and pointing to the drawings of the other side." "Good Lord," said the Senator and the session was over. And yet, in a way, the joke *was* on us, because the drawings were at three-quarter and most elaborate and confused, and were about four feet square and there were four or five of them, and I don't think anyone thoroughly understood them but the draftsman that made them. Nowadays we could show the whole thing on a couple of sheets 24 x 30.

But don't let me give the impression from all this that I advocate incomplete or slipshod drawings. I don't. I believe in giving all information, all necessary information in the minutest detail. For example, take the ceiling here reproduced for the Grand Reception Room of the Elks Memorial. This is a barrel vault with semi-circular ends, there being no break at the ends but all the ceiling on the same face, that is to say, the stile face. You will notice the penetrations on the circular ends are the same width at the spring line as those on the straight part, and the same distance apart, but that their apices are nearer together on account of the circle, and the hexagonal panels between them are distorted, particularly the one at the start of the turn. To overcome this distortion we shifted the axis of this penetration toward the center of the room and it was a very complicated affair altogether. We had a model made in plaster of half the ceiling, run smooth on the line of the stiles. This we checked and changed until it scaled to a hair. Then from our developed plan we laid out the penetrations in pencil on the model and the modeler put in the penetrations with the greatest care. We then laid out the whole ceiling on the model and found our development was exactly right. We took the template of the soffits of the pendentives from the model, as they were warped surfaces and impossible to develop mathematically, and then we scaled off the original development and established figures for every panel, showing all the variations and adjustments that had to be made. From this drawing the modeler is working, and I don't see how he could work without it, but I must confess I have never made, or even seen a drawing like it. Generally we have merely made a plan and some sections and direct elevations, and modelled it direct at full size, but it was an awful job and seldom worked out as it should in the building. Here everything is developed and figured and we know it will work out. It took some time to do, but it will save time in the end. I forgot to say we made the original on heavy Whatman's mounted on straw board as we wanted to avoid shrinkage, but we found even this heavy board shrank somewhat. I've tried heavy pattern paper too, but it also comes and goes. I'd really like to know something that will stay.

We laid out in somewhat similar fashion the panels in the main dome of the Elks Memorial, except that here the development was merely a matter of mathematics. Note the multitude of figures we have given; they are a great help to the modeler. Somebody has to establish them and the architect is the proper one. And still in the question of figures, I have found it an excellent scheme to figure ornament. In a carved marble panel for example, which has a wreath and two swags, we locate the center of the wreath and points of support of the swags. This not only helps the modeler but it establishes the location for the carver who often gets a fragmentary model.

I could carry this description much further in detail, in point of fact, I've just scratched the surface, but in general what we have been trying to do is to simplify our drawings and yet make them more complete than they have been in the past, and make them easier to handle.


ERECTED IN THE YEAR NINETEEN HUNDRED
D AND TWENTY FOUR BY THE BENEVOLENT
T AND PROTECTIVE ORDER OF ELKS OF THE
E UNITED STATES OF AMERICA IN HONOR OF
F ITS MEMBERS WHO SERVED IN THE WORLD
D WAR
3/4" SCALE DETAIL OF INSCRIPTION IN FRIEZE OF MAIN ORDER
ELKS NATL MEM HQ BLDG
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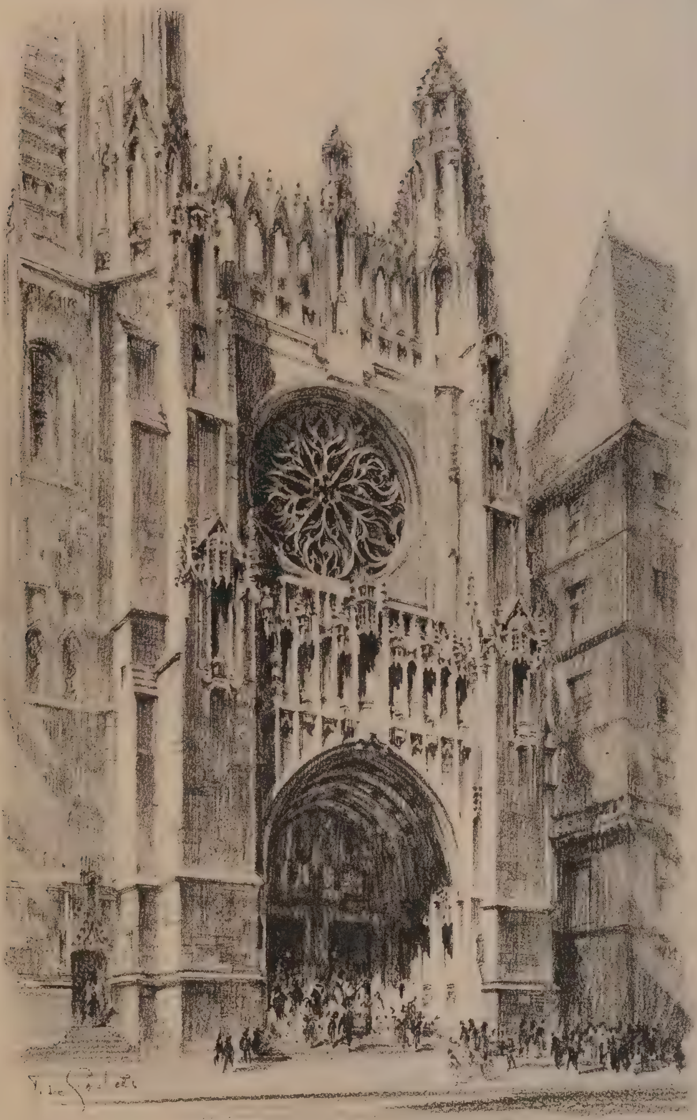
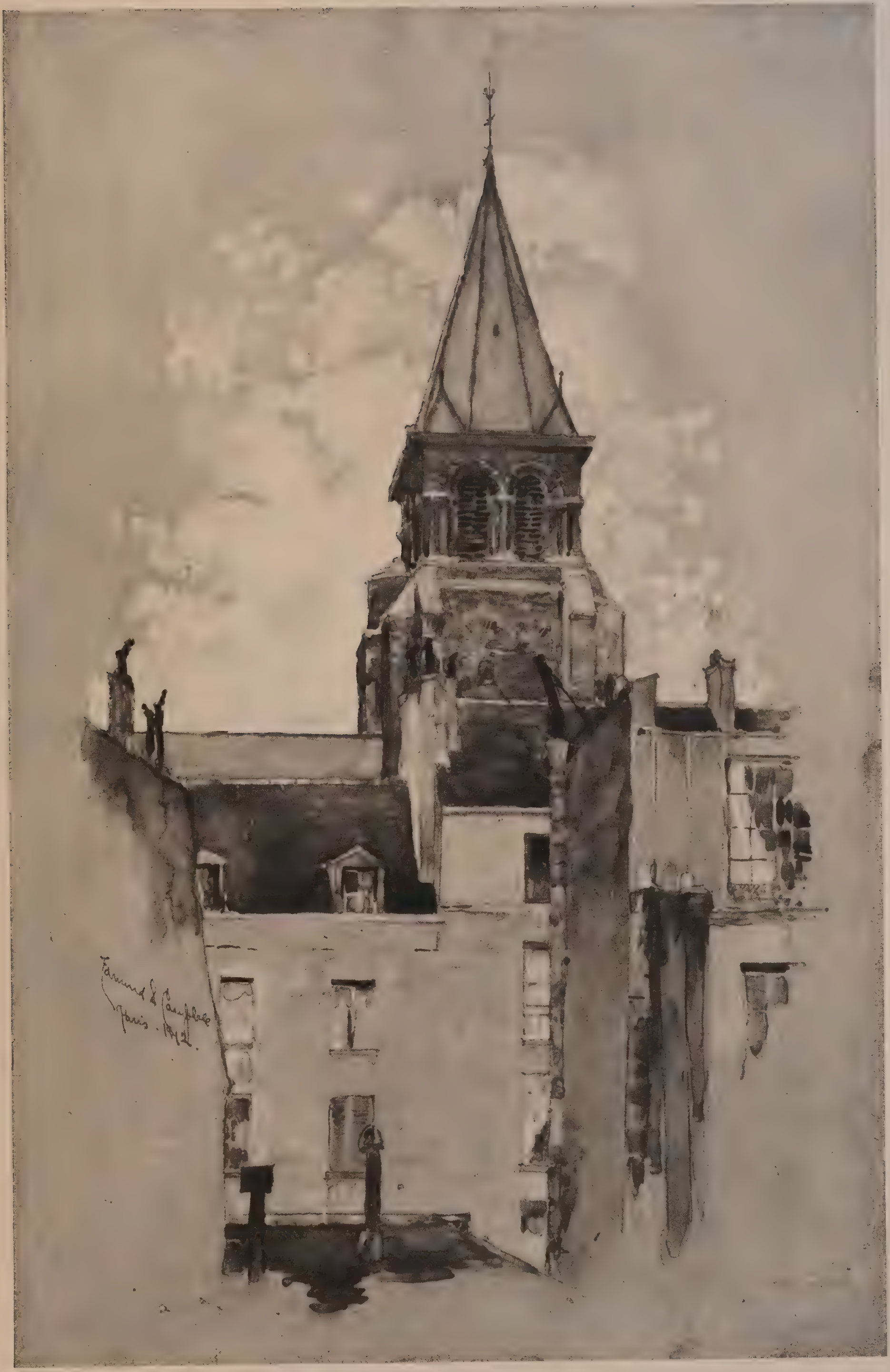
¾" Scale Detail of Inscription in Frieze of Main Order, Elks Memorial, Chicago, Ill.
Egerton Swartwout, Architect.



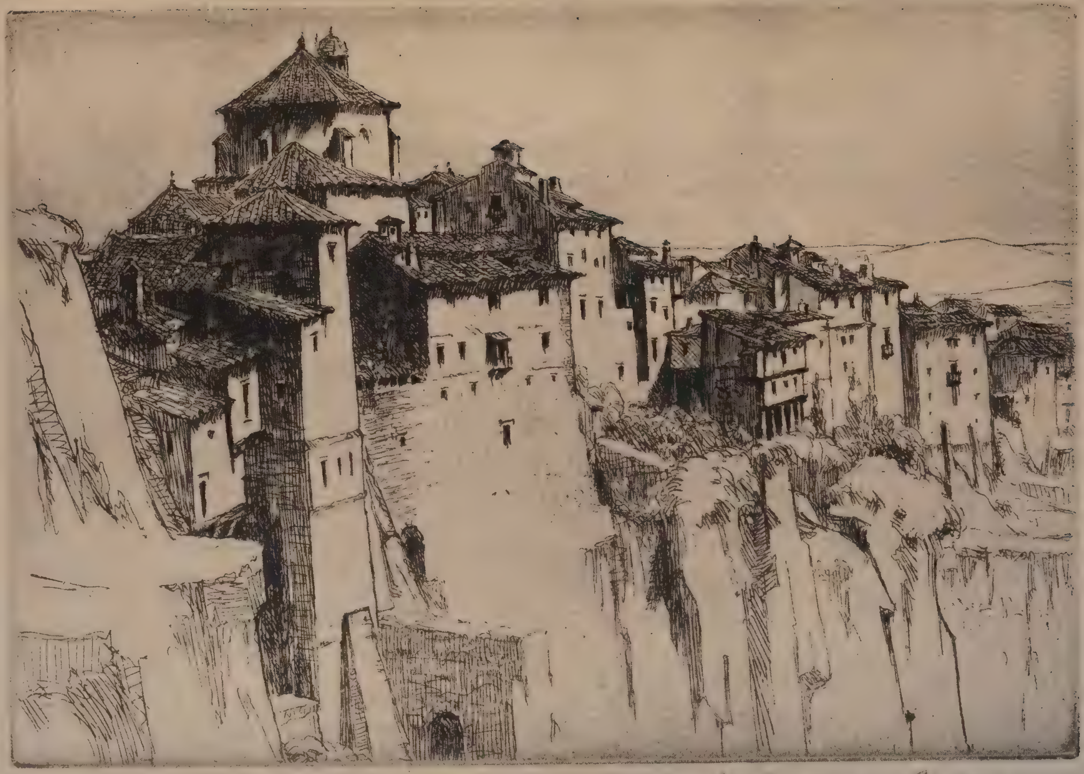
PENCIL DRAWING BY THEODORE de POSTELS, ST. THOMAS' CHURCH, NEW YORK.

On the opposite side of this sheet is reproduced one of the most delightful of Mr. de Postel's pencil drawings of architectural subjects, a spirited and sympathetic sketch of St. Thomas's Church. The handling of a range of delicate tones in a masterly manner is one of the notable features of this drawing.



DRAWING IN GOUACHE BY EDMUND S. CAMPBELL
TOWER OF ST. GERMAIN des PRÉS

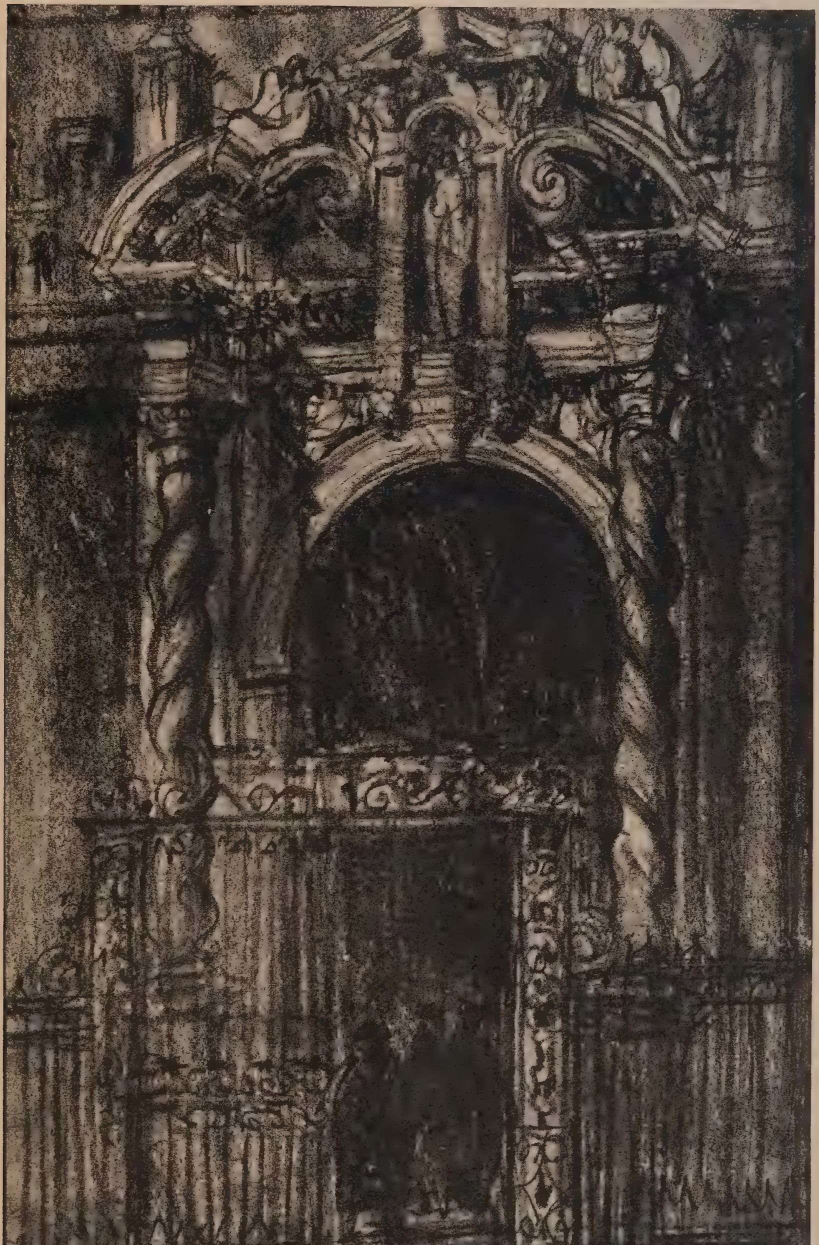
A highly effective drawing of the tower of St. Germain des Prés by Edmund S. Campbell is shown on the other side of this sheet. The drawing is admirably done in gouache and it provides an excellent example of the use of this medium. On another page of this issue is a small reproduction of a sketch of the same tower from a different point of view, also done by Mr. Campbell, but in water color. The difference in the character of gouache and water color is made interestingly apparent by a comparison of these drawings.



S. Chatwood Burton

ETCHING BY S. CHATWOOD BURTON.

One of the many etchings made by S. Chatwood Burton as a result of his travels in Spain is shown on the other side of this sheet. It is well worth studying for its pictorial composition of lines and masses of tones, for the perception and skill with which the picturesque character of a complex subject has been grasped, simplified and presented in a delightful etching.



CRAYON DRAWING BY FRANCIS KEALLY
DOORWAY OF ST. MARY'S CHAPEL, AT OXFORD.

On the other side of this sheet is reproduced a crayon drawing by Francis Keally, one of the many interesting drawings he made during his two years' study trip abroad. Mr. Keally works in a broad, bold manner, using charcoal and pastel as his mediums most frequently. The effectiveness of his method is well shown in this drawing of the doorway of St. Mary's Chapel, at Oxford.

MASTER DRAFTSMEN, VII

EMMANUEL LOUIS MASQUERAY

1862 — 1917

WHEN informed of the writer's intention to include Masqueray in this series of essays, Mr. Whitney Warren wrote as follows:

"He came over here, as you know, to work for Carrère & Hastings; afterward with Hunt; he was with me for four or five years.

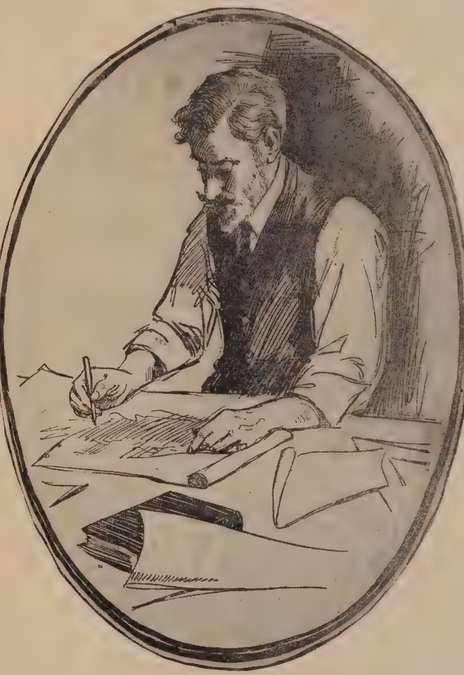
"I know of no man that I admire more than Masqueray. Aside from his tremendous artistic savoir and technique, his devotion to his mother was something classical.

"When the Beaux Arts Society started on educational work, he founded the first atelier and only gave it up when he was called to be Architect-in-Chief of the St. Louis Exposition. Personally I feel that this country owes more to him than to any one master through the work he did in the various offices in which he was employed and for which (alas!) he got little credit, but especially through his efforts in his atelier where he formed so many of the young men who are now the backbone of the profession.

"Masqueray was a great Frenchman and did a tremendous lot for his country in his simple, straightforward way."

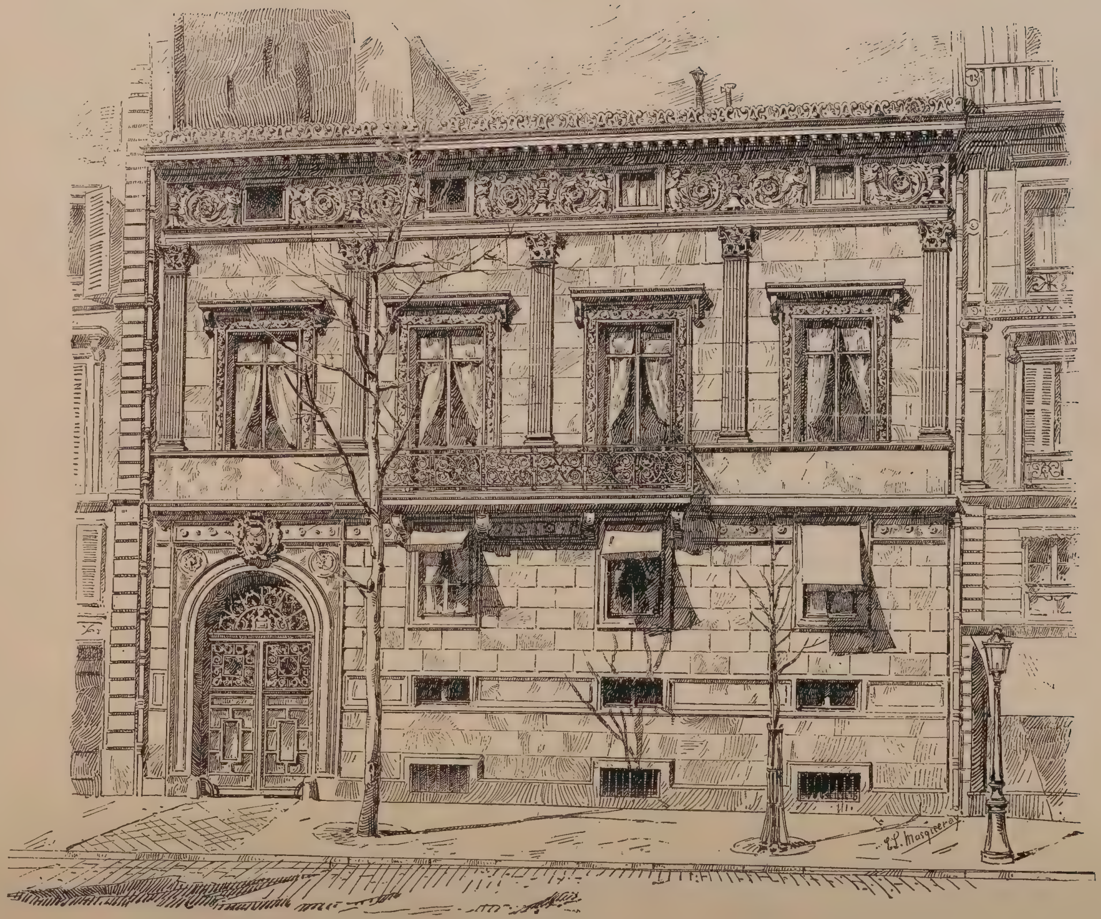
The letter from Mr. Warren seemed like a quotation of an oral statement of Richard M. Hunt made nearly thirty years earlier, when approached by a young student for advice as to the course to follow in studying architecture in America.

It was principally as a designer of monumental architecture and as a very able teacher of dignified planning that Masqueray was known, and will be remembered, to the architectural profession; but by all who knew his drawings he was recognized also as a master of architectural draftsmanship of a clear, expressive style and a water-colorist of architectural and landscape subjects of the very rarest talent. He cared little for technique although his own was always good and, when occasion required it, very fine and delicate. Most of the latter kind of drawings were made in his younger days. He admired and designed in big scale; thought of big, broad effects; wished to produce them with the least possible amount of work, and confined his efforts to essentials. His desire to produce as much as possible with the minimum of effort has a great deal to do with the effectiveness of his style. He had periods of great energy followed by stretches of pottering and idleness and a strong tendency with regard to detail "to leave it to George." Yet, he could draw anything and used nearly every medium with facility when he was so disposed. His interest was in design—composition. He would make a good sketch for a design, leave it to an assistant to make a finished line drawing, correct the free-hand parts and then render it with great directness and simplicity in beautiful misty or pearly greys, finishing it with touches of bright color, always well-placed.

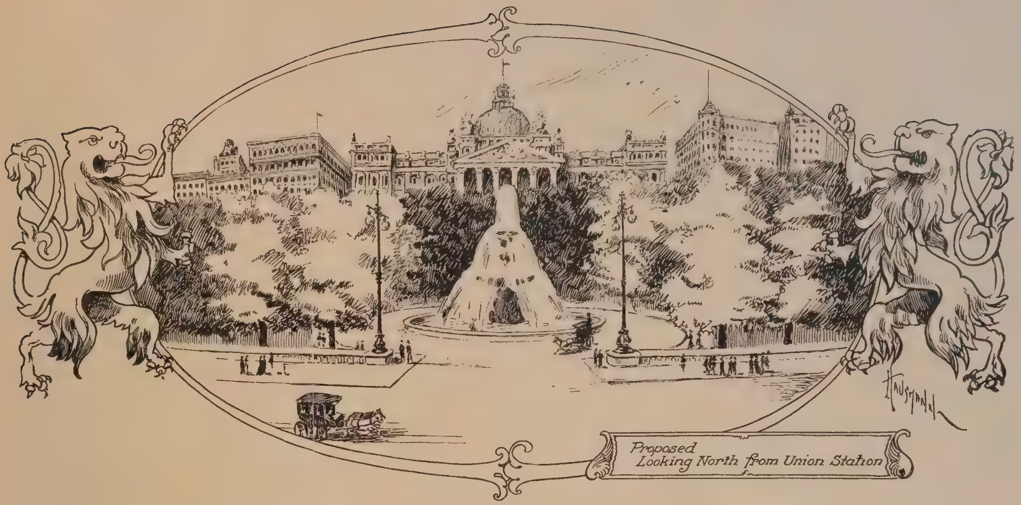


E. L. Masqueray, Sketched at his Desk by G. W. Harker, of St. Louis.

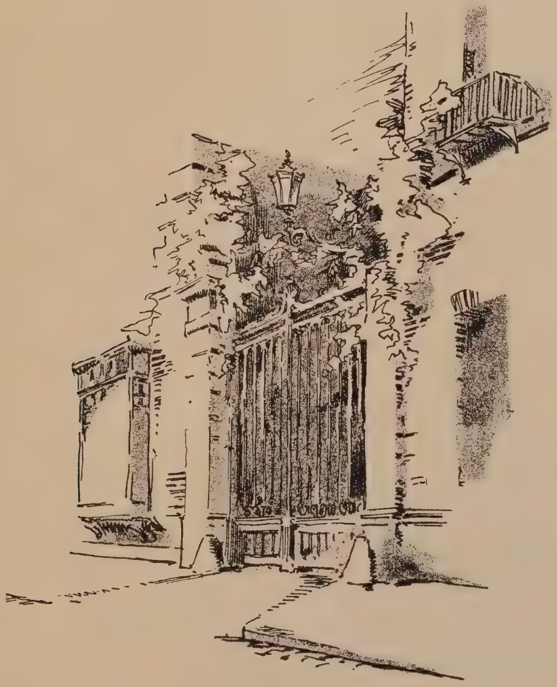
His training was obtained at the Ecole des Beaux-Arts, first under Loisne and later under Ginain. The former was an advocate of the spirit of the Mediæval and Early Renaissance—all for freedom and for the fine, light, delicate and ornate; the latter for the orderly, serious and very dignified neo-Grec. Loisne's instruction stimulated a naturally vivid imagination, Ginain's calmed and held it in restraint. Masqueray was long remembered at the Ecole as a brilliant artist—one of those who "should have won the Grand Prix de Rome." He won the Prix Deschaume at the age of eighteen years, and the Prix Chaudesoignes the following year. The latter provided for travel and study in Italy. His measured drawings of the then little known Castle of Urbino gained him a medal of the first class at the Salon of 1883. In the succeeding salon he exhibited some remarkably fine drawings of the tomb of Cardinal Phocas in the Church of Santa Maria del Popolo at Rome; and the next year the Chateau de Rambures in Picardy. This Chateau, commenced in the Eleventh



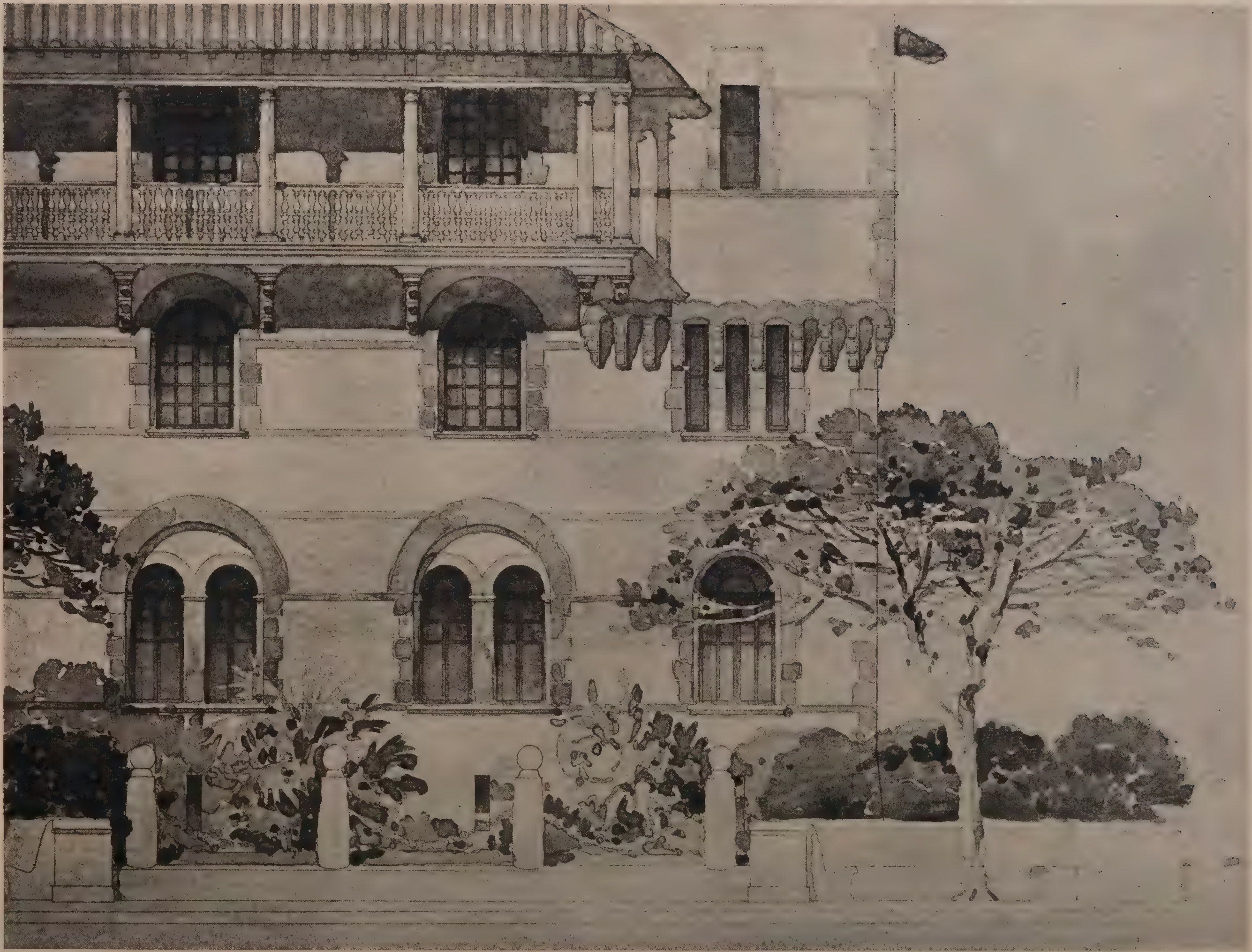
Pen Drawing by E. L. Masqueray. Hotel Pourtales, Paris.


Proposed
Looking North from Union Station

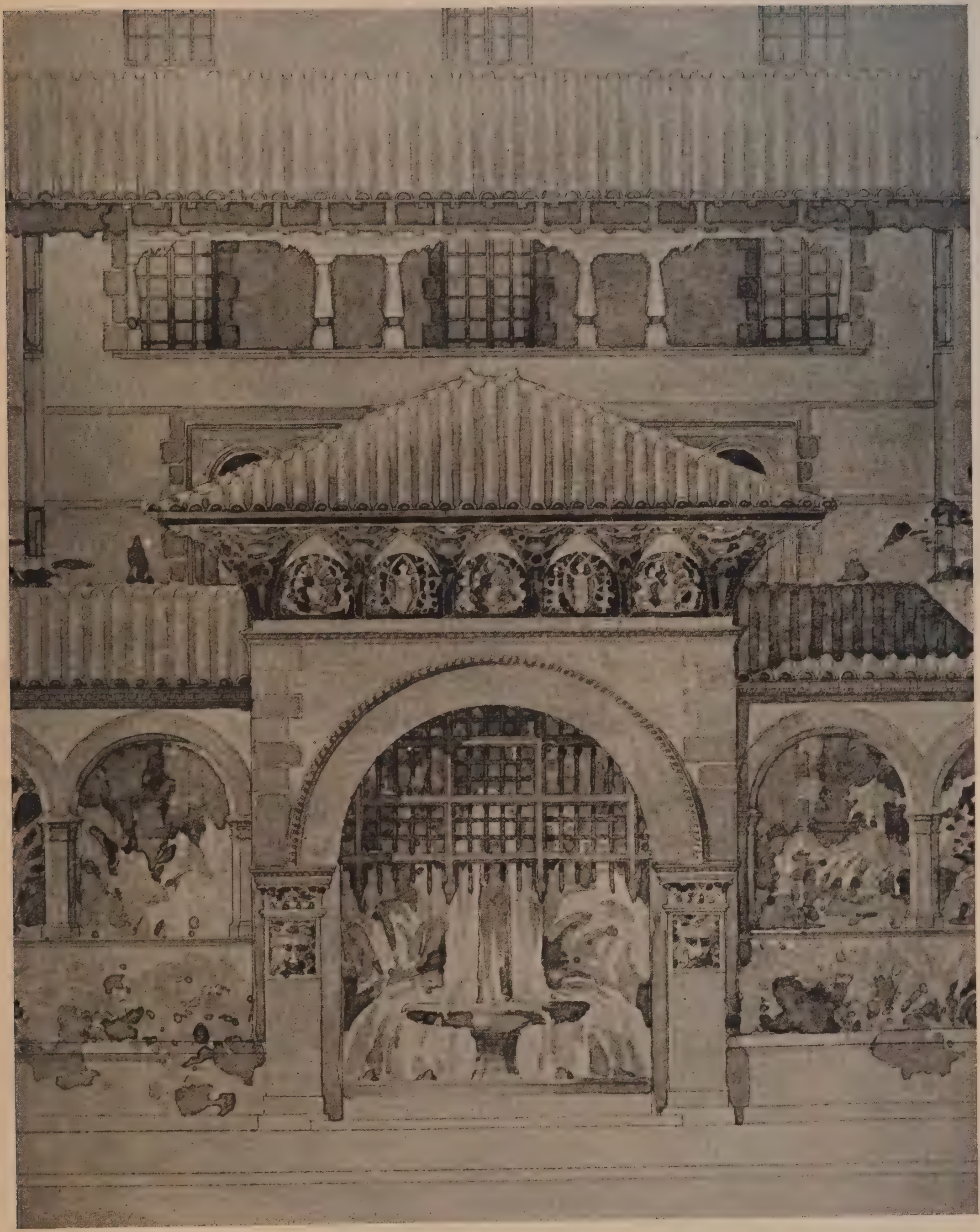
Pen Drawing by E. L. Masqueray of His Conception for Treatment of Some of the World's Fair Grounds.



Crayon Drawing by E. L. Masqueray.
Gateway Entrance to an Alley.



Actual Size of Original Water Color Drawing by E. L. Masqueray. Hotel Ponce de Leon. The Entire Drawing is Shown Greatly Reduced on Page 64. Carrère & Hastings, Architects.



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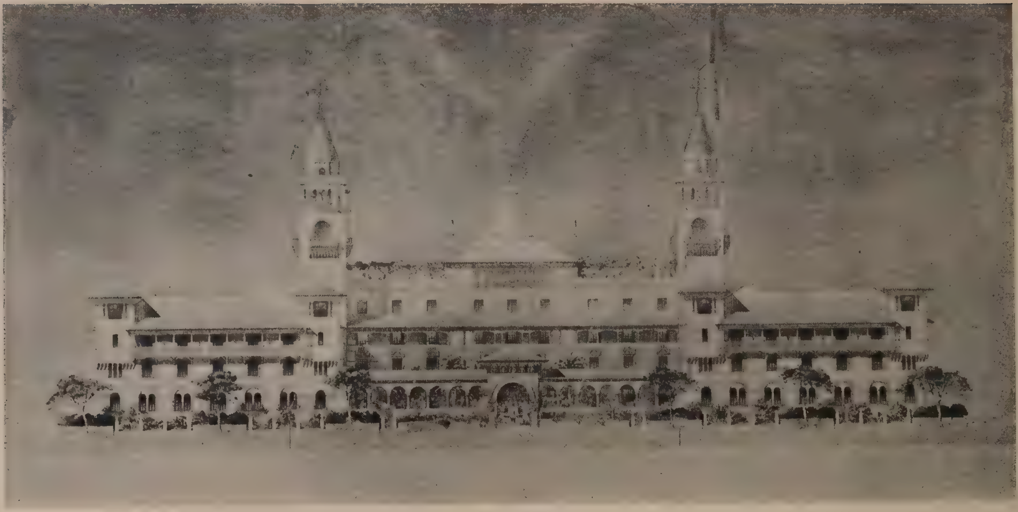
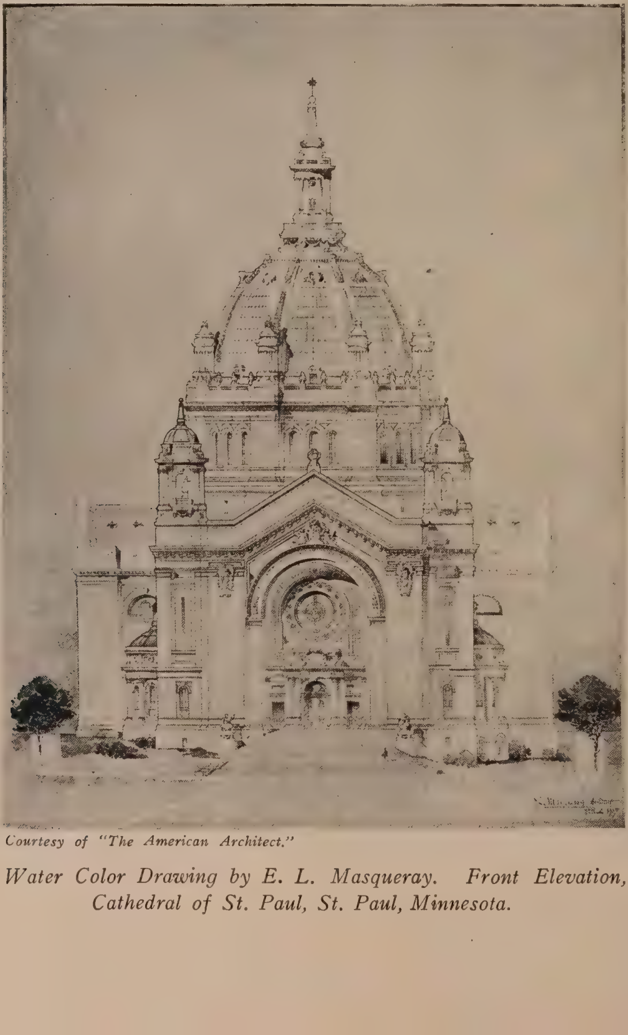
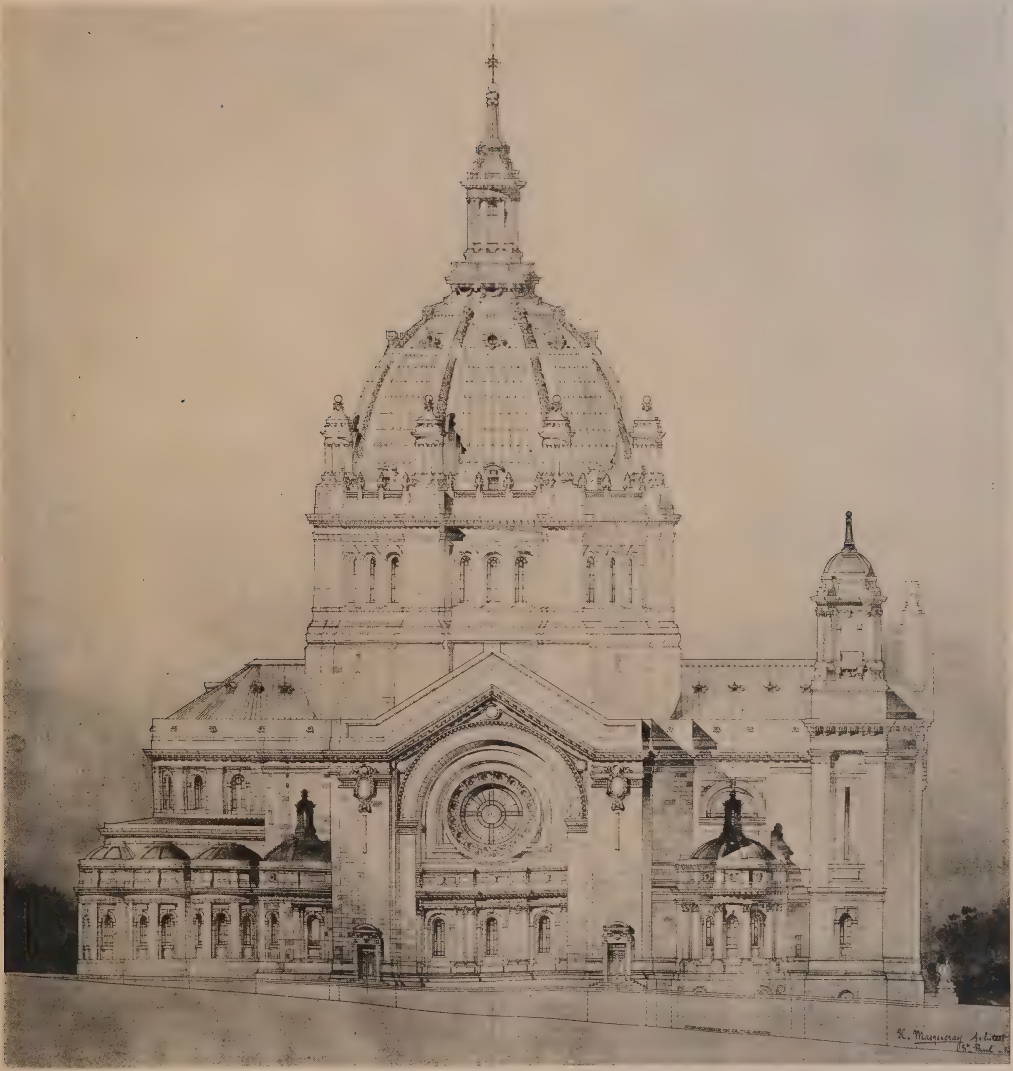


Water Color Study by E. L. Masqueray. Hotel Ponce de Leon, St. Augustine, Florida.



Courtesy of "The American Architect."

Water Color Drawing by E. L. Masqueray. Front Elevation, Cathedral of St. Paul, St. Paul, Minnesota.



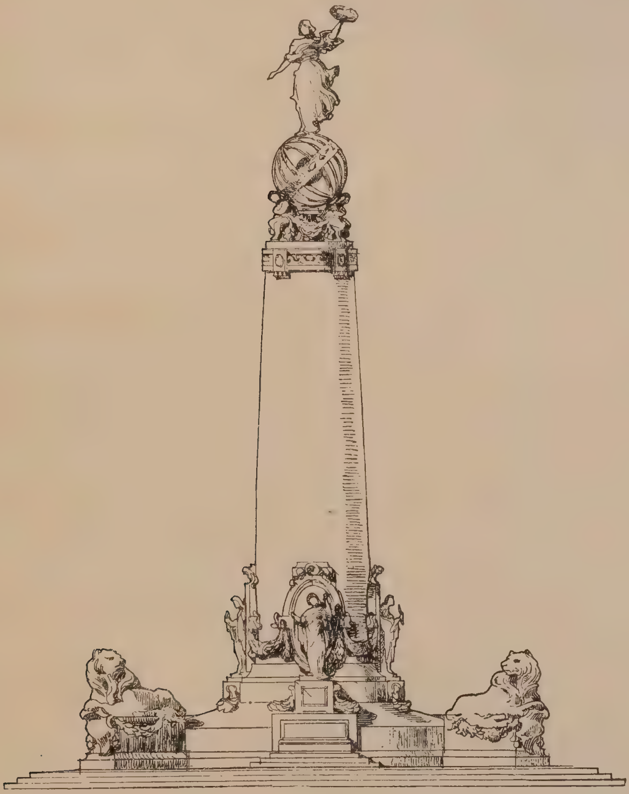
Water Color Drawing by E. L. Masqueray. Side Elevation, Cathedral of St. Paul, St. Paul, Minnesota.

Century but not completed until the Fifteenth, lies between Le Treport and Longpre and is considered one of the most complete examples of the military architecture of the Middle Ages. The drawings were purchased by the Minister of Fine Arts for the Commission des Monuments Historiques. His restoration of the Palais de la Cour des Aides at Rouen and drawings of Amiens Cathedral, exhibited at a later Salon, led to his appointment to the Commission des Monuments. Soon afterwards he came "to see America" and was first employed in New York by Carrère & Hastings (Mr. Carrère had been a fellow student in Ateliers at Paris) on the studies of the buildings at St. Augustine, Florida; later he assisted the late Richard Morris Hunt and the latter's sons and successors upon the study of the Metropolitan Museum and other important work. Then he went with Warren and Wetmore with whom he remained until he was appointed Chief of Design of the Louisiana Purchase Exposition and went to St. Louis.

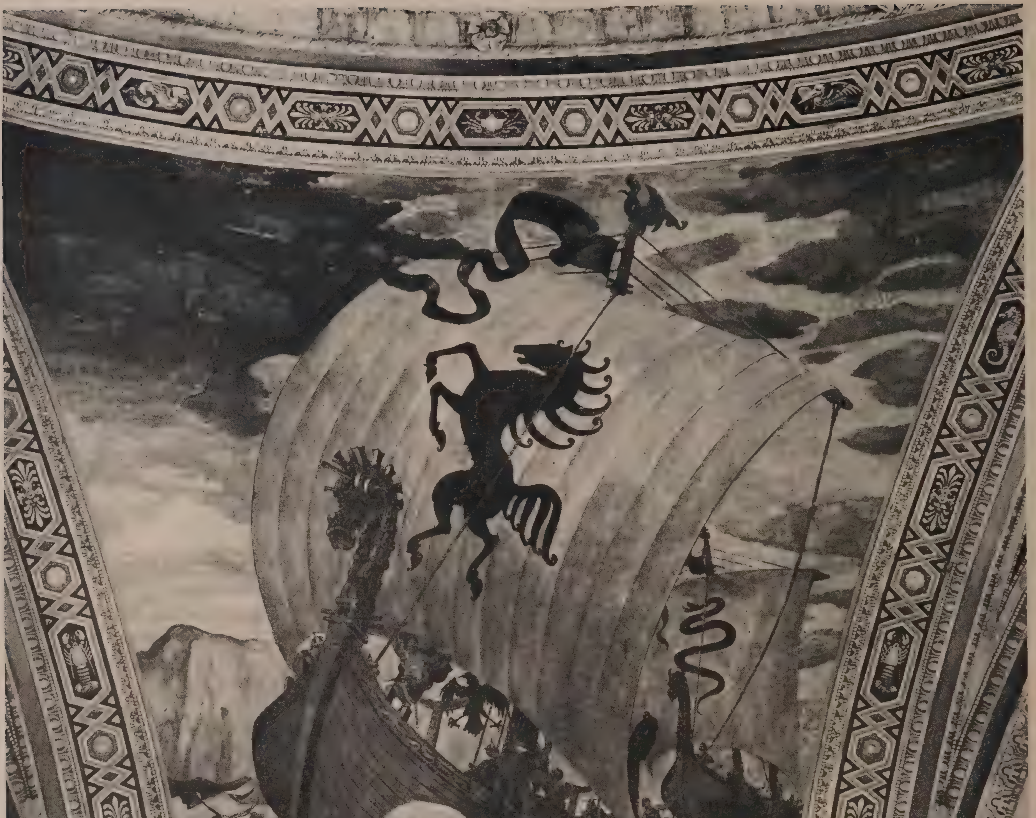
It was while Masqueray was acting as assistant to Richard M. Hunt that he decided to establish an atelier in New York in which to train young men on the lines of the Ecole des Beaux Arts. Hunt and Carrère supported the idea and the formation of other ateliers was undertaken to create inter-atelier emulation and establish the French system of training by means of competitions. To Masqueray is due the credit of founding in the year 1893 the system of training now carried on by the Beaux-Arts Institute of Design—the nearest approach to a national school of the fine arts in the United States. As patron of the Atelier Masqueray he soon attracted the attention of architects and draftsmen throughout the country by reason of the extraordinary success of his pupils in the competitions held by the then newly-founded Society of Beaux-Arts Architects. He had the faculty of finding and quickly developing every particle of talent which a pupil possessed. His atelier at 123 East 23rd Street became a student centre in New York—even the ladies came to demand admission. Masqueray was subjected to many new experiences and was fortunate in being of a nature to take them for what they were worth. His gayety seldom deserted him but probably the shock of his life came when one of the young ladies expressed the desire to "take the course" during her summer vacation. Masqueray expressed the fear that two months might not be sufficient for a proper architectural education; to which the young lady responded, "Oh, I only want to know just a little about Greek, English Gothic and the Puff and Powder Styles—just enough *to teach.*"

During the time he spent in New York he made many designs, studies and sketches for other architects and often rendered perspectives in pen-and-ink and water-color. His preference was for delicate color effects in warm and cool greys. Upon one occasion a new "customer" came with a perspective to ask him to color it, and asked the price. "Zat ees a small drawing—I sharge you seventy-five dollar," responded Masqueray. "Well," asked his customer, "What colors would you use?" and received the reply, "A leet red, a leet blue an' a leet yellow an' some grey—zat about all—I think." "But, Mr. Masqueray, I think it ought to be a rather *lively* water-color—what would you charge to use more color?" "Oh!" exclaimed Masqueray, his eyes lighting up and his face beaming with a smile, "You make it twenty-five dollar more, an' I put on *all ze colours in ze box!*" His inability to completely master the "Amurkun languige" remained with him as long as he lived, and he never fully understood some Americans. He believed we were all humorists and always looked for a joke, while his French logic forever searched for motives or reasons for acts or comments which never existed in the American mind. Nobody ever knew him long without having an original story about him. His good-humored, rather noisy and nasal voice speaking in pidgin English was enough to attract amused attention anywhere. He was of medium height and stocky build, had reddish-sandy hair and beard and wore a long moustache, the ends of which he curled or stroked upward anxiously as he talked; very large grey eyes with a peculiar childish innocence of expression which went strangely with heavy and intent eyebrows. He took great pleasure in "bloofing like an Amurkun" to make a great pretense of bragging about his work and his pupils and staff; but was always aware that what he was claiming should not be taken too seriously. He could always see a joke and did not mind whom it was "on," and there were many occasions when it was on *him*—especially after he went to St. Louis. His advice to his assistants on the design of the exposition was continually "make it simp" (he could never pronounce the final syllable). One of the boys coined a phrase which he induced Masqueray to quote—"The principal thing is to make it simple" and Masqueray joined in the roar at his expense after repeating, a second time "Ze princip' sing ees to make it simp' zen eet will be less troub' to buil'." But he stuck to his idea of keeping things "simp" and produced the best work at that exposition. He personally designed and made preliminary drawings of most of the buildings, including three or four fine renderings, produced in the Exposition office and took complete charge of the planting and landscape design. He became a thorough American in spirit. Although he visited France several times, he preferred the United States and said shortly before he died that he really liked St. Paul—where he went to live after the Exposition work was finished—and would rather live there than in Paris, or his native city of Dieppe, and intended to remain the rest of his life at St. Paul. He produced a great deal of architectural work while at St. Paul including some impressive drawings for the interiors of the Cathedral there and a design which he made for a proposed Cathedral at Dubuque. During a summer vacation at the Bay of Fundy he made a number of water-colors of landscapes and the sea, worthy of a place in a national museum. He had in his sketches, and also in his rendered elevations, a way of indicating trees that was unsurpassable—they were conventional, almost poster-like trees, yet gave a very naturalistic effect. His rendering was the characteristic of his work that did not change under pressure of American influence. His natural love of refined things was not improved here, and his recognition of the lack of skilled workmen in our country led him to abandon refined design that would require the exercise of such skill. His work as an architect finally met the level of average educated American judgment or "taste"; but his style of presentation did not come down to the same level. His inimitable indication may be seen to be the same in the reproductions of his late drawings made at St. Paul, and in his early work in this country on the Ponce de Leon.

Francis S. Swales.



Crayon Drawing by E. L. Masqueray. The Louisiana Territory Monument.



Voyage of Lief Ericson to America, Year 1,000, Cunard Building, New York City.
Ezra Winter, Painter.

Drawing by Gunnar Hallstrom, "War"

GALLEYS AND VIKING SHIPS

BY FRANCIS S. SWALES

THE galley was a ship the principal means of propulsion of which was by oars. Sails are shown in most representations, but are assumed to have been merely for auxiliary power. Sculptured pictures of early Egyptian ships indicate the use of both oars and sails.

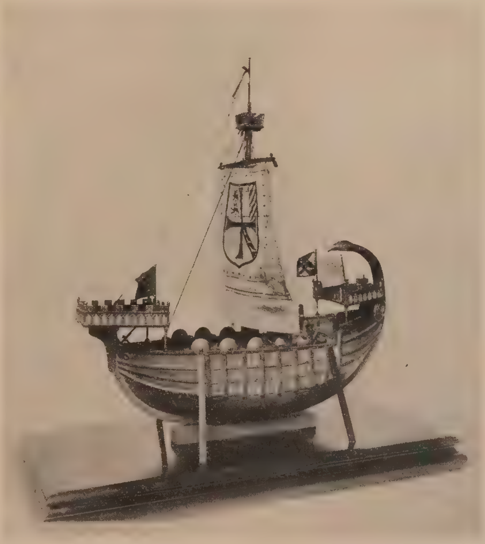
Representations on coins, seals, carvings of Greek and Roman vessels, show one or more than one bank of oars. The sculptured prow of the vessel upon which is the Winged Victory of Samothrace, now in the Louvre and the mere suggestion of the prow of a Roman ship forming part of the wall at the end of the Tiberian Isle at Rome and other fragments, have served as the bases of many fanciful representations and conjectural restorations of ancient galleys. It is not very probable that any of such works by artists or archaeologists are anywhere near to the actual designs of the periods.

The classic descriptions of fabulous vessels leave much to be desired in matters of fact. Although the description given in the Odyssey of the ships in which the great Ithacan voyaged during ten years coincides rather in form and capacity notably with the actual Viking ships discovered during the last half century.

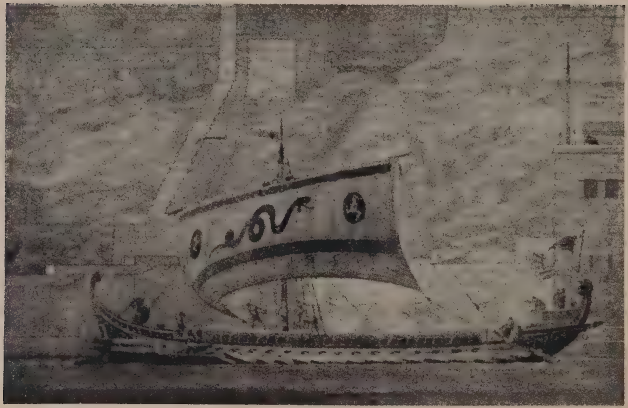
Thus M. Hulot's splendid Greek galley shown on his drawings of the restoration of *Selinonte* may be said to be simply M. Hulot's idea of how a Greek galley may have appeared in the seventh or eighth century B. C. when Selinus was at the height of its glory.

Again Mr. Patouillard's "restoration" of the Tiberian Island the whole of which he assumes to have been originally the form of a ship, is highly conjectural, imaginative, ideal and inventive. Piranesi includes a drawing of the prow among his illustrations but did not seem to think that the embankment walls extended around the island. An "unofficial" photograph of the actual remains taken by Dr. Charles in 1892, when the Tiber was unusually low, showed nearly as much of the masonry to be then existing as was shown in Piranesi's drawing; but that is about all that Mr. Patouillard had upon which to base his magnificent conception. We can only hope that the Greek galley and the ship of masonry of the Tiberian Isle were as fine in reality as these French artists have imagined. It is probable that representations on ancient coins and seals were conventions and that the actual design of the ships was much modified in such cases in order to adapt the representation to the circular forms.

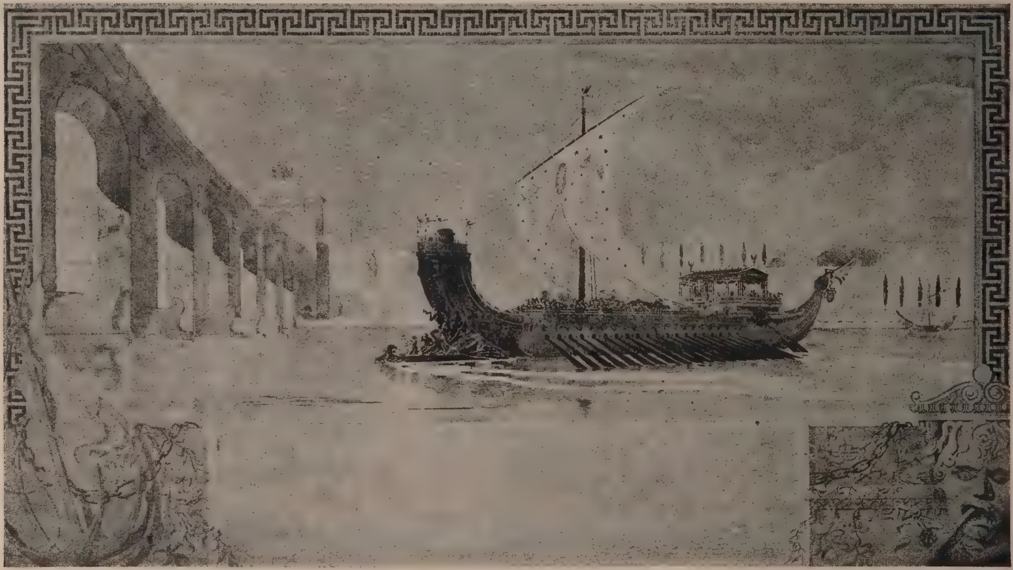
Of the earliest sailing ships ever found, the most complete was that known as the Gokstad



XIII Century English Crusader Ship. Property of the University of Illinois. Model Built by Henry B. Culver.

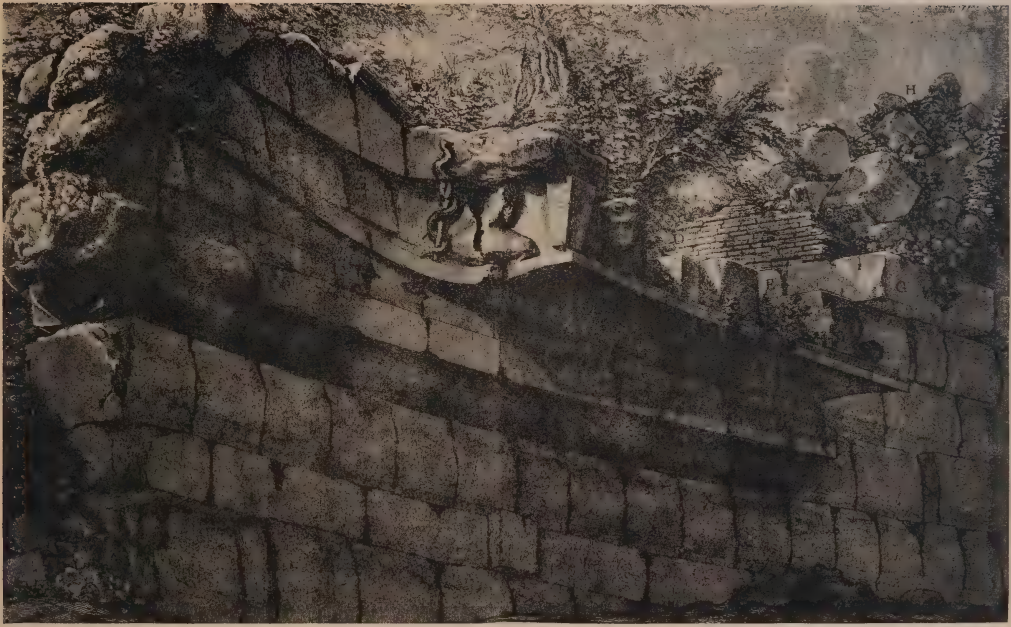


Student's Design for Ancient Galley, Ecole des Beaux Arts, Paris.

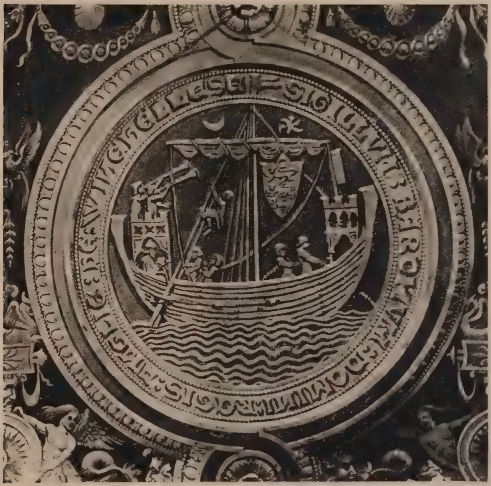


Courtesy of "The American Architect."

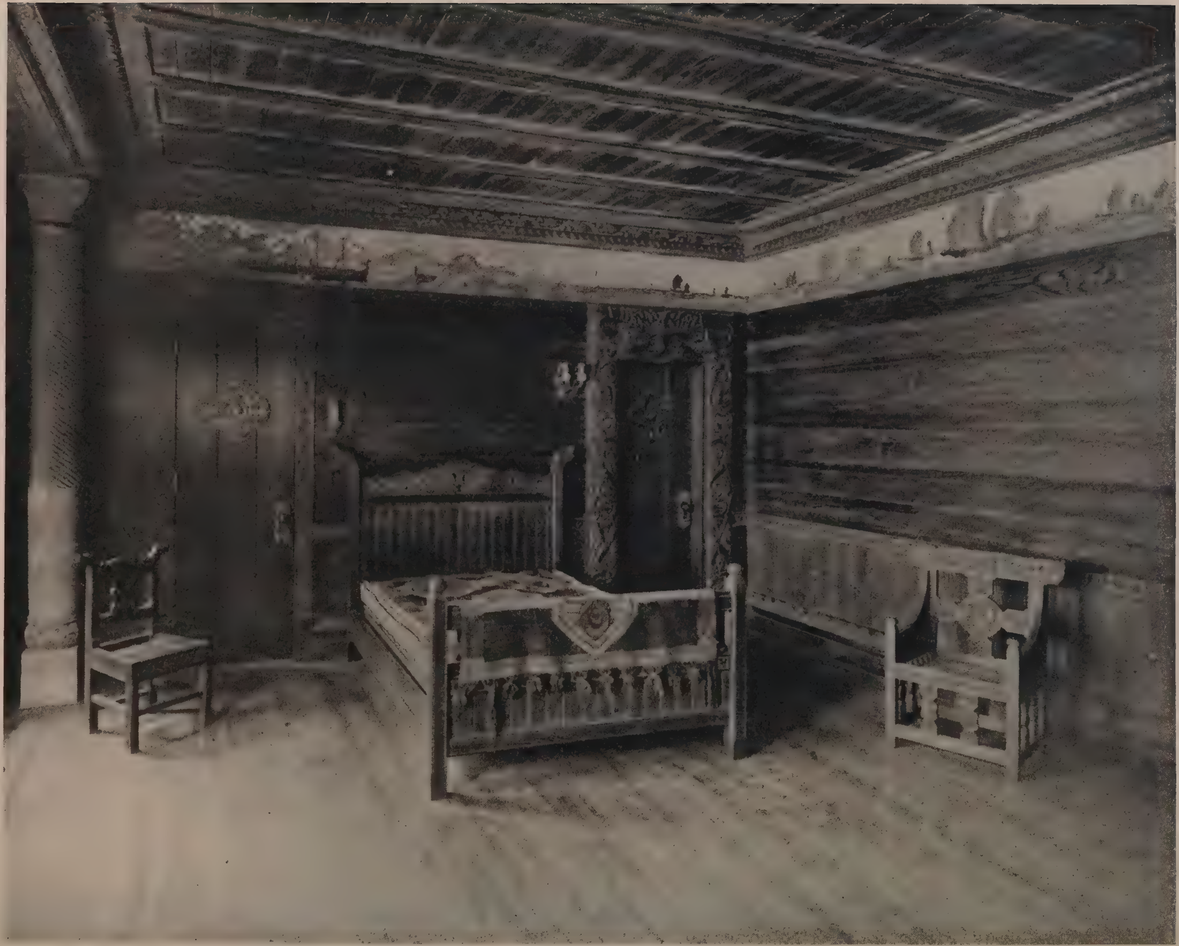
Design by C. H. Boyd for "A Roman Pleasure Boat."



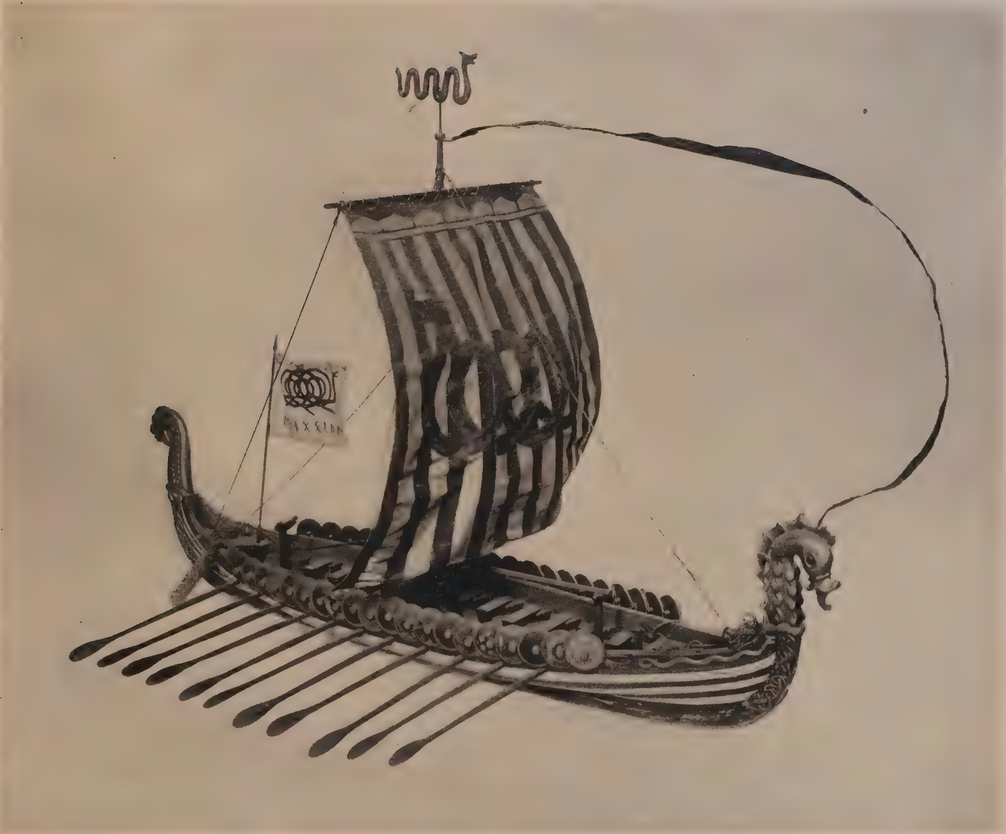
End of the Tiberian Isle, as Drawn by Piranesi, About 1750,
Showing Remains of the Prow Form in Masonry.



Winchellese Seal.
From the Decorations on the Ceiling of the Cunard
Building. Ezra Winter, Painter.



A Room in Scandinavian Style Designed by the Rambusch Decorating Co., for Mr. Malcom D. Whitman, New York City.
Painted Frieze Showing Viking Ships by Jonas Lie.

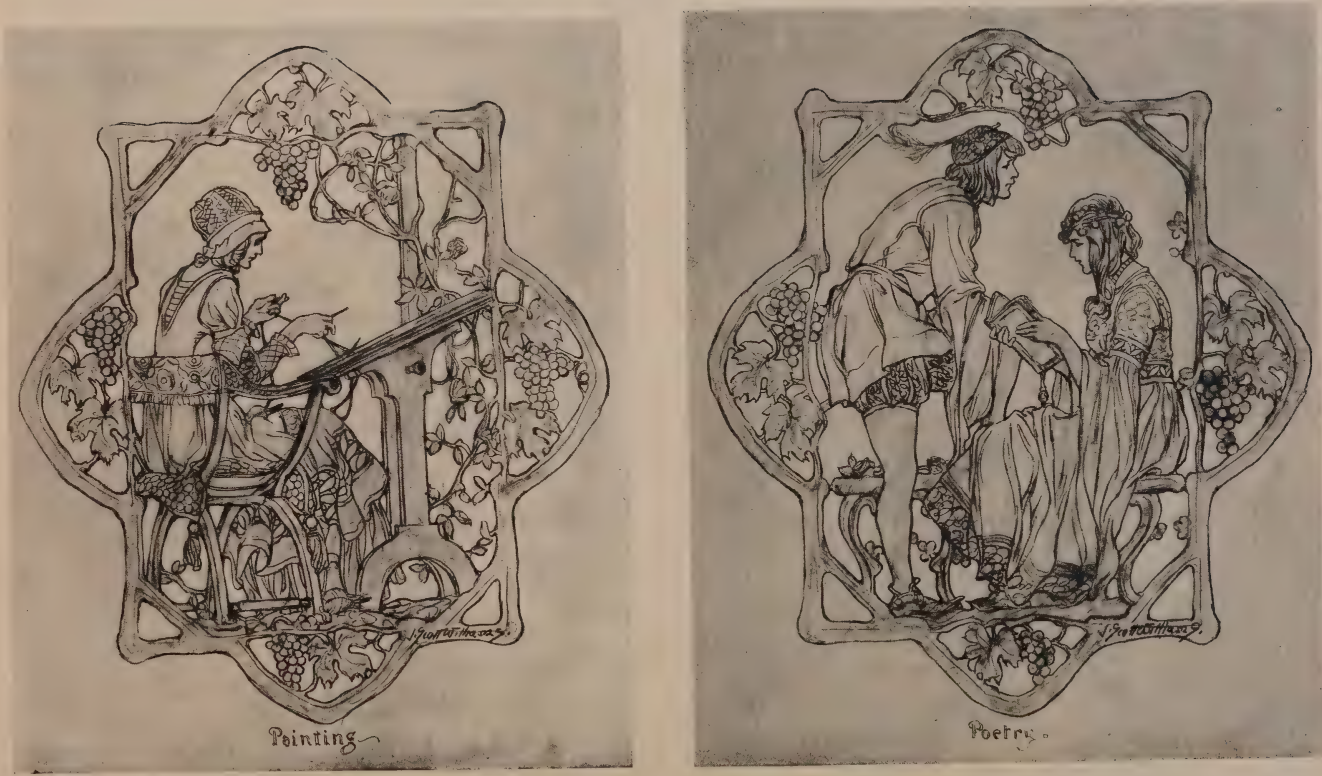


X Century Viking Ship, After Original Ship Unearthed at Gokstad in Norway in 1882.
Model Built by Henry B. Culver.

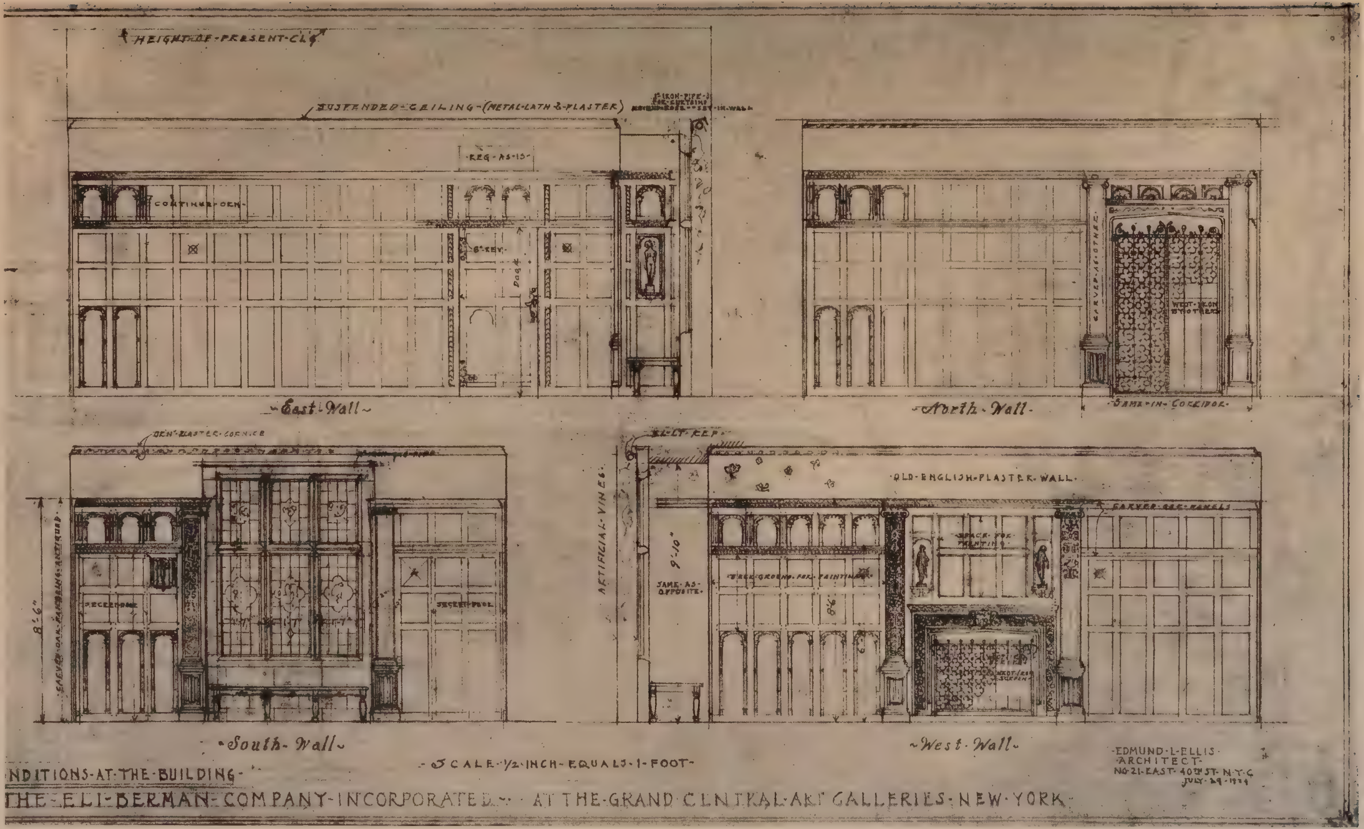
ship found in 1882, unearthed by Professor Nicolayson from a mound near Christiana, Norway. It is a Viking ship probably of the 10th century and is now in the Museum of the University of Christiana. Practically the whole hull, and the steering oar or rudder, were found intact, and the other oars, the sails, shields, anchor, etc. The ship, which is approximately one hundred and three feet, over all length, and sixteen feet beam and six and one-half feet deep amidship, was primarily a coast boat, but capable of deep sea going, as was proved when an exact replica was made in 1893 and sailed across the Atlantic to become one of the most interesting exhibits at the World's Fair at Chicago. The head and tail emblems had disappeared. Descriptions in the Sagas enable these to be restored with some degree of accuracy. The unearthing of the Oseberg ship in 1903 in Vestfold County, on the west side of the Christiana Fjord, added some new information showing a canoe-like formation of stem and stern with beautifully carved ornamentation, and almost completing the form of head and tail as described in the Sagas. This find demonstrated conclusively that the Viking Ship became the tomb of the sea chief, and in it were buried, with his remains, all of his earthly possessions. It also raised the interesting question, because bones supposed to be those of a woman were found in the sepulchre, whether the prehistoric Norwegians made burnt offerings of widows.

The sails and rigging of ships shown in the Norman-French Bayeux tapestry of the 11th century and on the seals of the cities of Hastings and Winchelsea of the 13th century and of La Rochelle as late as 1437 A. D., are all substantially the same. The Hastings seal shows the Kind, Noble, or captain, seated under a castellated canopy, or pavilion in the stern of the boat. The Winchelsea seal shows pavilions both fore and aft; the former a two story structure and the latter with a battlemented deck above upon which two heralds stand with trumpets in hand. All of the ships shown on the seals have but one mast with a single yard. The sails appear to

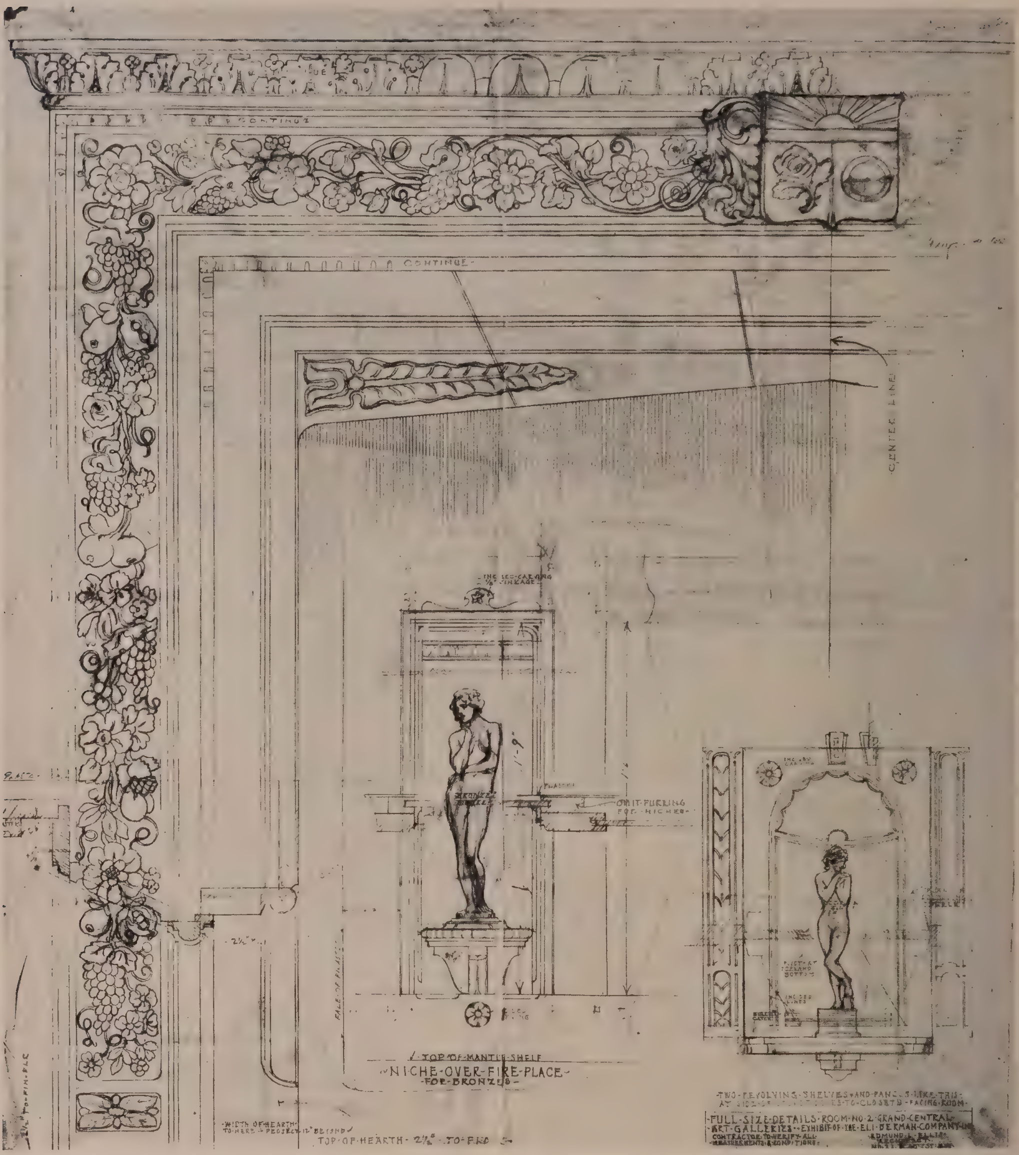
(*Continued on Page* 84.)



Designs for polychrome lead-and-glass work by J. Scott Williams. The designs are delicately cut from lead and painted in polychrome. They are inserted as central motives in windows of clear, leaded glass of antique appearance. Against the light from without the designs show as effective silhouettes. When illuminated by the lights of the room they show as painted ornament in vivid, well-harmonized colors, laid on with bold brush strokes. These are two of the six designs carried out in the leaded glass window shown in the drawing reproduced on the opposite page.



Design for Panelled Room at the Grand Central Art Galleries for the Eli Berman Company, Inc. Edmund L. Ellis, Architect.


CONTINUE
CENTER LINE
OMIT FURRING FOR NICHES
TOP OF MANTLE SHELF
NICHE OVER FIRE PLACE
FOR BRONZES
WIDTH OF HEARTH TO HERE PROJECT 12" BEYOND
TOP OF HEARTH 2½" TO FLO
TWO REVOLVING SHELVES AND PANELS LIKE THIS
FACING ROOM
FULL SIZE DETAILS ROOM NO 2 GRAND CENTRAL ART GALLERIES EXHIBIT OF THE ELI BERMAN COMPANY INC
CONTRACTOR TO VERIFY ALL MEASUREMENTS & CONDITIONS
EDMUND L. ELLIS

Detail of Design for Panelled Room at the Grand Central Galleries, for the Eli Berman Company, Inc. Edmund L. Ellis, Architect. See Drawing on Opposite Page.

THEATRE CONSTRUCTION

BY H. ROBINS BURROUGHS

A THEATRE is one of the most, if not the most, difficult problems of design, either architecturally or structurally, due to the fact that the latitude of design is practically unlimited. It is therefore important that a close contact be maintained between the architectural and engineering design, or at least the architectural designer should be supplied with such information as will permit him to plan intelligently and produce something which will ultimately work out satisfactorily from every point of view. Even in the preliminary sketches the structural features and general idea of the possibilities of the structural design must be considered. Unless this is done it will frequently be found that the sketches will not work out and that it may even be necessary to make fundamental changes in the arrangement in order to provide for a practical structural solution. The average modern theatre is devoid of interior columns. The roof and balcony, if there is a balcony, are supported on columns or piers concealed in the walls, and consequently clear sight lines, or visibility, is maintained throughout the entire seating area. The salient structural features about which the architect is primarily concerned consist of the following:

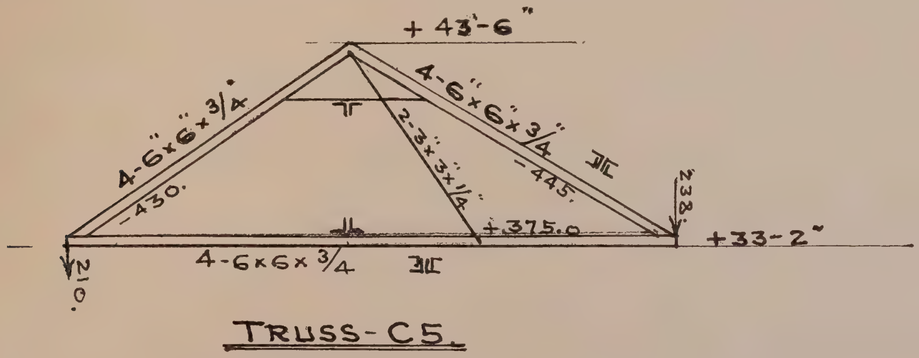
1. Proscenium Piers: The size of these piers depends on the size and height of the proscenium opening and they are in general not less than 2 ft. thick by 4 ft. to 6 ft. long and are constructed of brick bonded in with the 16″ brick proscenium wall.

2. Thickness of the walls and supporting piers, if any: The average rear stage wall of a theatre used for vaudeville performances extends to a height of from 60 ft. to 70 ft. according to the height of the roof over the stage, which is determined by the height of the proscenium opening and is approximately twice the height of the proscenium opening plus 5 ft. These walls should be at least 24″ below the stage, 20″ above the stage to a height of approximately 35 ft. and 16″ below the roof line with 12″ parapets. At the same time piers should be provided at intervals not to exceed 16 ft. as a means of lateral support. The sidewalls of the theatre if they do not exceed 40 ft. in height may be 12″ above the orchestra floor and 16″ below. If the theatre contains a balcony and the walls are approximately 60 ft. high then it is necessary to increase the thickness of the wall from the orchestra floor to the under side of the balcony to 16″. The rear or end wall, if the height does not exceed 40 ft. may be 12″ thick and if a balcony is used it should be increased to 16″ below the balcony. This is on the basis of using solid brick walls.

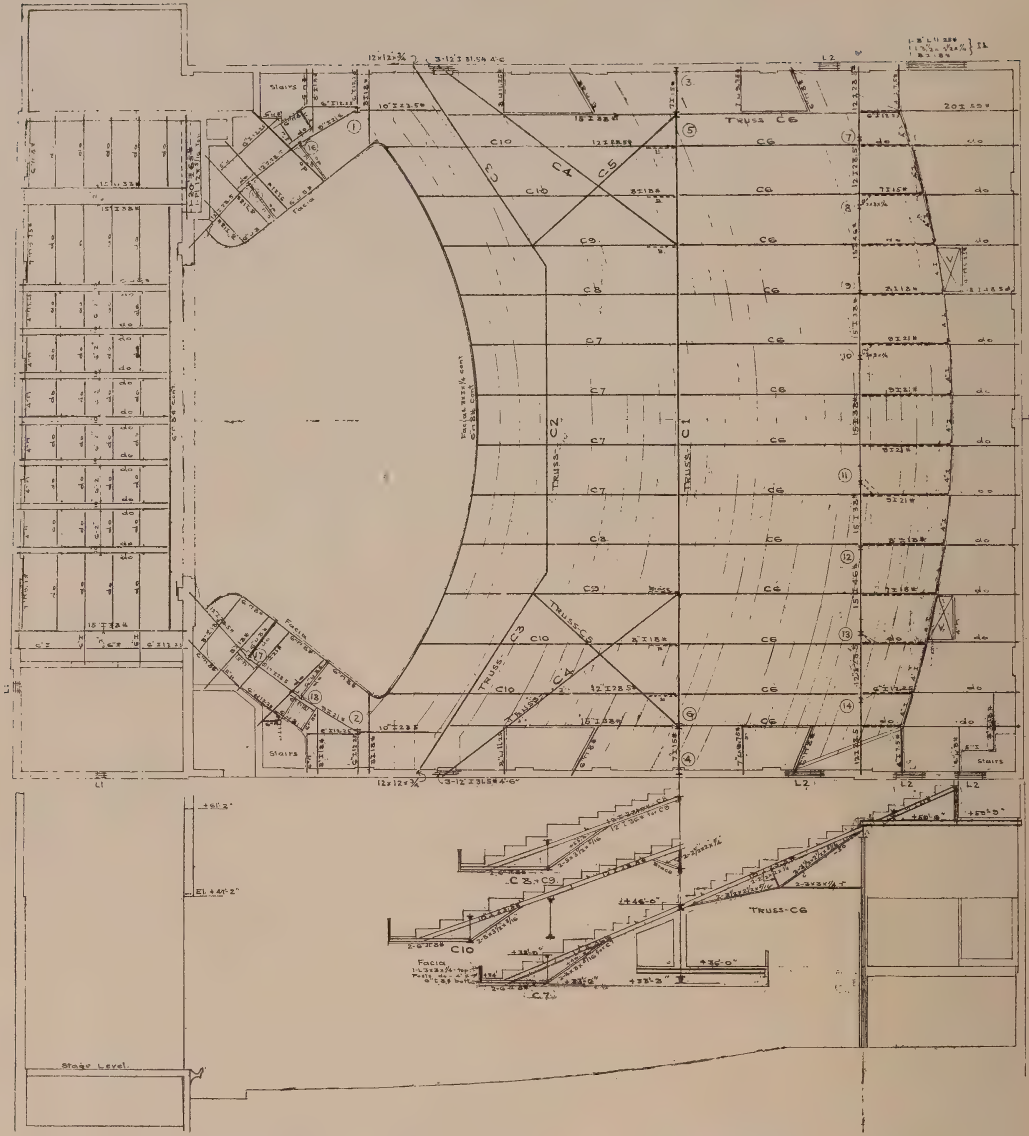
3. Type of construction of the proscenium arch: The proscenium arch may be constructed of either a solid reinforced concrete girder, usually from 10 ft. to 12 ft. or more in depth according to the spans of the opening and not less than 16″ thick, properly reinforced, or it may consist of a structural steel truss fireproofed with brick, terra-cotta, or cinder concrete. The writer recommends reinforced concrete as it has been found in the majority of cases to be the most economical.

4. Required depth for the balcony construction: The proper depth to be used for the balcony construction depends to some extent on the slope of the steppings and the elevation of the balcony front, or rather the distance from the front of the balcony to the stage. In any event, consideration must be given to obtaining the proper depth for the main truss which usually spans from wall to wall as the main support of the balcony. This truss should preferably not be less than one-twelfth of the span and the location of it will depend upon the available height between the balcony steppings and the ceiling line. The usual and most economical construction for the support of the front part of the balcony is what is known as the cross-arm cantilever type, as illustrated on page 78.

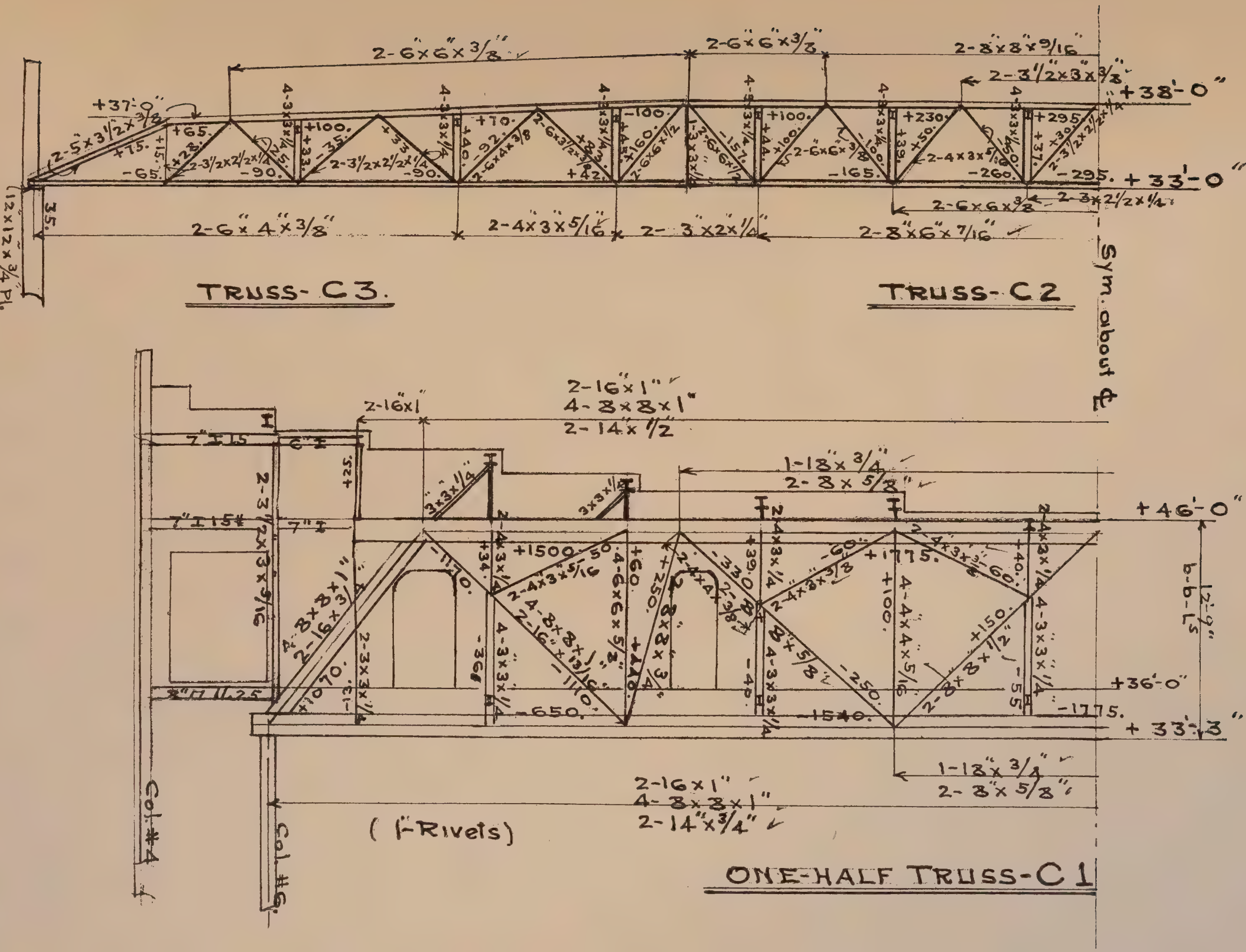
It is also important to provide sufficient depth for the front truss which is usually located below the



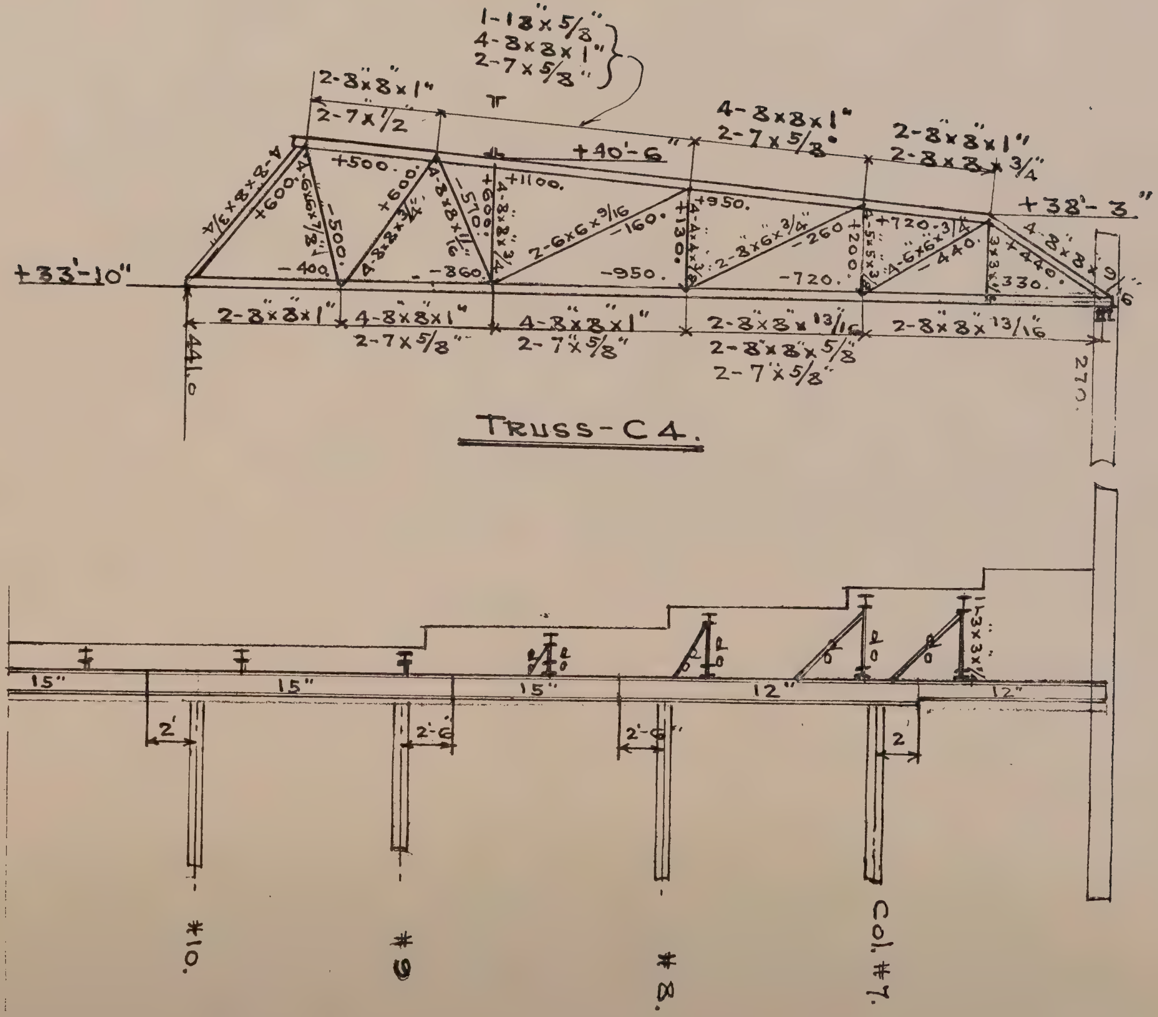
Detail of Balcony Framing, The Alexander Hamilton Theatre, Paterson, N. J.



The Alexander Hamilton Theatre, Paterson, N. J. Fred W. Wentworth, Architect.
H. Robins Burroughs, Engineer.



Details of Balcony Framing, The Alexander Hamilton Theatre, Paterson, N. J.



Details of Balcony Framing, The Alexander Hamilton Theatre, Paterson, N. J.

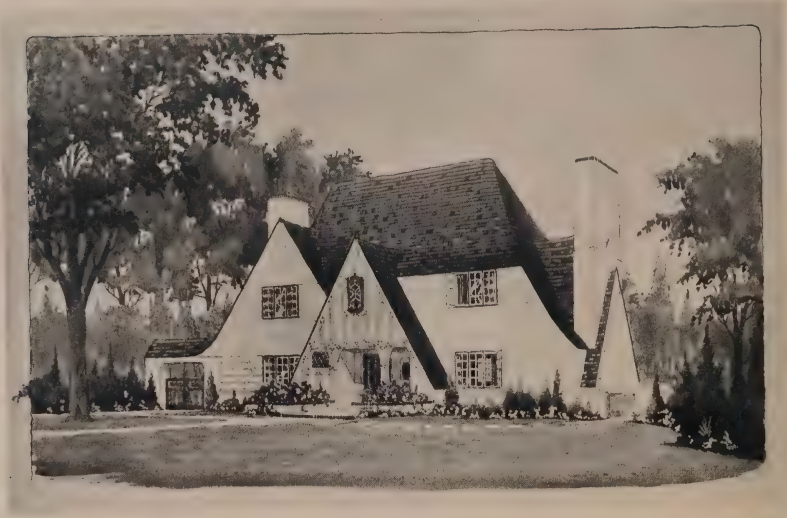
front cross-over. Unless this is given consideration in the preliminary stages it may be found that insufficient depth has been provided and that this type of construction cannot be used, or in fact any other practical type. Therefore, in order to obtain a practical design it may even be necessary to re-study the entire layout. Proper consideration must be given to the diagonal girders supporting the cantilever trusses in order to make certain that there is sufficient clearance between the ceiling line and the vomitories leading to the front cross-over. Another important consideration is the necessity of getting through the main balcony truss at the vomitory points which are usually three in number and arranged one on either side and one at the center. In order to accomplish the necessary clearance for these vomitories it is frequently found advisable to provide two columns, placed about 5 ft. from the face of the wall and along the inner edge of the two side aisles extending into the orchestra floor. This permits the truss to stop at these points and provides an unobstructed opening between the columns and the wall on the mezzanine floor. One opening is then provided at the center of the truss leading from the mezzanine floor to the front cross-over. The front truss spanning between cantilevers should not be less than 5 ft. in depth and the ceiling line should be arranged accordingly, due to the fact that it is necessary for cantilever beams to project through this truss as a means of support for the three front rows of the balcony.

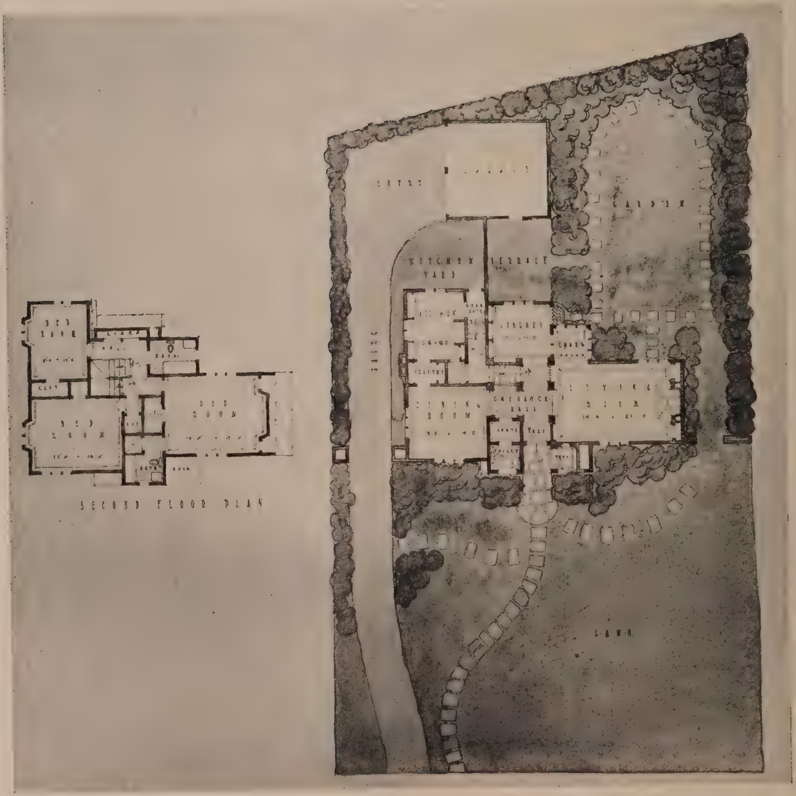
The construction of the balcony stepping may be made either of cinder concrete treads and risers poured as a homogeneous mass, and supported on angle iron brackets, or the treads may be made independently and should be not less than 4″ thick, the risers being filled in later with terra cotta or gypsum blocks. A continuously poured cinder concrete balcony with the proper reinforcement is recommended by the writer because of the high degree of rigidity it possesses. It has a tendency to reduce vibration and very frequently the vibration of a balcony has been found to be the basis of numerous complaints by the patrons. A theatre balcony may develop a considerable amount of vibration and still be perfectly safe, but usually the lay mind does not realize this and becomes alarmed at the slightest vibration.

5. Required depth for the mezzanine floor construction: This is frequently a source of error due to the fact that the mezzanine is generally supported by the bottom chord of the balcony truss and the rear end wall. An open well is generally placed in the center of the balcony to provide for ventilation and act as a relief to the close proximity of the mezzanine floor from ceiling line to the orchestra floor. This opening adds to the complexity of design of the structural features and makes it necessary to have a greater depth between the mezzanine floor and the ceiling line—generally 2 ft. is required for the average theatre. If, however, the architectural design will permit the use of concealed hangers this construction may be somewhat modified.

6. Height of the roof above the ceiling line: This is determined by the required depth of the truss supporting the roof. If the ceiling line contains a dome, the roof may be supported on two cross trusses so arranged as to permit the dome rising between the trusses, in which case a reduction of roof line may be obtained. In any event, it is not advisable to attempt to reduce the height of the roof line beyond an economical point. Roof trusses should have an economical depth of approximately not less than one-eighth of the span. It will generally be found more economical to increase the depth of the truss and the slope of the roof so as to have an angle of not less than 20 degrees. This will permit of using a lighter live load and a consequent reduction in steel.

7. Height of the roof over the stage: This is determined by the height of the proscenium opening and the elevation of the gridiron. The elevation of the gridiron should be approximately twice the height of the proscenium opening, and the finished stage roof construction at least 5 ft. higher. The entire stage roof construction should be fireproofed. If tanks are required they should preferably be placed over the roof and near one side in order that the greatest load may be brought directly on the supporting walls and consequently effect a reduction in the amount of steel.





House for Marsh K. Powers, Esq., at Cleveland, O. Bloodgood Tuttle, Architect.

PENCIL POINTS

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THE AMERICAN ACADEMY IN ROME

FROM a letter recently received by C. Grant LaFarge, Secretary of the American Academy in Rome, from Gorham P. Stevens, Director, we quote the following items:

"Another Academic year is over, and a new one has started.

"All registration records were broken last year—there were no less than ninety. The greatest previous number was sixty-one. In the Mirafiore days the registrations numbered twelve. We are growing up.

"The properties are in good condition, and the Ward-Thrasher Memorial completed. Mr. Davico has closed the fiscal year with a record balance. Our superintendent of Buildings and Grounds, Mr. Canziani, is again at work after a major operation as the result of a wound received in the war. All is in readiness, I believe, for a successful year.

"The Franks and the Merrills are in residence, and the other Professors, except Prof. Lamond, are on hand and ready for work. Prof. Van Buren is not to go to the American School at Athens, but to stay indefinitely with us. All the new Fellows have arrived, except Finley who is due from Naples tomorrow. The registration of "Visitors" and "Visiting Students" is about normal. The lectures in the School of Classical Studies begin tomorrow.

"Prof. Kelsey of Michigan, one of the Councilors of the Academy, is in Rome. In a few days he leaves for London and America. He has succeeded in buying for the University of Michigan a large portion of a Library of Turkish MSS. His four research Fellows from the University of Michigan, who are to help him this winter in his Archaeological work, have registered at the Academy, and his research Fellow in Architecture is to arrive next week. Prof. Kelsey has shown special interest in trying to secure suitable living quarters on the Janiculum for our women students.

"The executors of Mrs. Jack Gardner's estate are trying, through the Embassy, to have her Greek statue, which has been for many years in the students' salon, removed to Boston. We shall be sorry to lose the statue, but, as it is to go to a public museum in America, it will do more good to American Art there than with us, where but a limited number of people see it.

"Mr. H. Nelson Gay of Rome, who owns the largest library (50,000 volumes) in the world on the Risorgimento, would think seriously of bequeathing his books to the Academy if the Academy were to agree to certain terms. Such a library would become in the future a valuable asset, as Mr. Gay has more than five thousand unpublished documents. The stirring events of the period of the Risorgimento are rapidly losing their political character and becoming historical."

RUDOLPH J. NEDVED

RUDOLPH J. NEDVED won the Chicago Architectural Club travelling scholarship of a thousand dollars in 1923 which entitled him to six months' travel in Europe. He is a graduate of the architectural course of Armour Institute of Technology where he now is an instructor. Mr. Nedved studied under Prof. Edmund S. Campbell to whom he feels greatly indebted for his constructive criticism and inspiration.

He has just returned after a thirteen months' trip with his wife, Mrs. Elizabeth Kimball Nedved, on a very detailed itinerary made out by his patron, Prof. Campbell, which included the following countries; England, Belgium, France, Spain and Italy.

Mr. Nedved expressed great enthusiasm upon his return for the American architects. He believes they are now in a great maelstrom of eclecticism from which surge strong personalities and individualities which in turn serve as stepping stones for that inevitable goal—national character in American architecture.

BOSTON ARCHITECTURAL CLUB ELECTS OFFICERS

THE following officers of the Boston Architectural Club for the year 1924-25 have been elected:

Henry R. Shepley, President; H. D. Chandler, Vice-President; M. B. Gulick, Secretary; Louis C. Newhall, Treasurer; F. V. Little, Executive Secretary; Directors: H. D. Horner, H. D. Walker, E. S. Dodge, J. H. Holden, E. F. Welsh.

The class enrollment in the Club's Atelier numbers, to date, seventy-five students.

THE PITTSBURGH ARCHITECTURAL CLUB

THE Pittsburgh Architectural Club at the annual election appointed the following officers: Kenneth R. Crumpton, President; M. Nirdlinger, Vice-President; William H. Harrold, Treasurer; Edward H. Steffler, Secretary. Leo A. McMullen, retiring President, was elected director for a term of three years. Other directors are Henry Hunt and Thomas Pringle. Mr. E. B. Lee was unanimously elected chairman of the Exhibition Committee for the coming year. The Club by vote sanctioned the formation of a sketch class under a local artist, Cris Walter.

THE ARCHITECTURAL CLUB OF WASHINGTON

MR. ROSENDORN, Secretary of the Architectural Club of Washington, sends in the following report of the Atelier Cunningham:

The Atelier Cunningham is now a department of the Architectural Club of Washington, which hopes to foster in addition to Beaux-Arts work, water color, free hand drawing and other essentials necessary to the art.

A recent election discloses one member as a president, whatever *that* means, another as a vice-president and secretary, whatever *that* means, and another as treasurer, you know what *that* means.

The club has its bohemians, artists, cartoonists, and a couple of members who pay dues. Our views on architecture may be obtained at the drop of any hat and our opinion of Beaux-Arts judgments will be mailed from an Illinois Penitentiary in the near future.

Our Beaux-Arts record was very good last winter. The summer problems were a success as Esquisses go. But aside from ambition, you must remember, that we have a tin roof *directly* overhead, a blue print room *directly* beneath, and bugs flying in the windows. Add those up.

CHICAGO ARCHITECTURAL EXHIBITION

THE Chicago Exhibition which has heretofore been held in the East Wing of the Art Institute will be held next year in Blackstone Hall, Art Institute, which with its rare collection of antique architectural fragments will form a distinctive and unique background for the Exhibit of Architecture of today. The Exhibit will be held in February this year instead of May as formerly, in order that it may be forwarded to the National Exhibition which will be held in the Grand Central Palace in New York next April.

Drawings will be received up to December 20th. Entrance blanks may be obtained from Pierre Blouke, 721 N. Michigan Avenue, Chicago, Illinois.

GALLEYS AND VIKING SHIPS

(*Continued from Page 73.*)

be decorated with ornamental patterns and armorial bearings. The shape of the hull is depicted as similar to half of a melon, cut lengthwise, with a wide keel extending high above the deck at stem and stern. Flags take an important part in the effect. Apparently the ship of the Vikings was substantially the model for north European vessels until the Fifteenth Century; the hull was deepened to give greater cargo capacity and the pavilions, or cabin structures, fore and aft were more and more developed. Italian ships were larger and finer in their appointments than the English ships until late in the Fifteenth or the early part of the Sixteenth Century.

CHURCH PLANNING

"STANDARDS for City Church and Religious Education Plants." is the title of a manual published as a guide in building, remodelling or equipping a church plant or parish house. It lists 112 essential elements in an ideal church and establishes standards for each item for the guidance of building committees and architects. This book is the work of many architects, builders and religious education specialists. It is bound in boards. 75 pages. Sent postpaid for Fifty cents. Address Mrs. Elsie P. Malmberg, Secretary to the Dean, Boston University School of Religious Education and Social Service, Temple and Derne Sts., Boston, Mass.

JOSEPH A. COLETTI

JOSEPH A. COLETTI has been awarded the Sachs Research Fellowship in the Fine Arts by Harvard University. The Fellowship carries an income of $2,000 annually and was established by Samuel Sachs of New York to enable "scholars of proved ability" to pursue advanced study in the history, principles or methods of the fine arts.

Mr. Coletti was born in 1898 and attended the public schools at Quincy, Mass. He apprenticed himself with the late John Evans, architectural sculptor of Boston. While working for Mr. Evans he was chosen by Mr. John Singer Sargent to assist him in the sculpture for the ceiling of the Boston Public Library. Upon completion of this work Mr. Sargent and Mr. Thomas A. Fox, Boston Architect, urged Mr. Coletti to get a university education. He prepared at Northeastern Preparatory School and entered Harvard University in 1920, concentrating on the Fine Arts. In his junior year he won a Travelling Fellowship in the Fine Arts and the following summer toured Italy, Switzerland, France, Belgium and England. Mr. Coletti received the degree of A. A. in 1924.

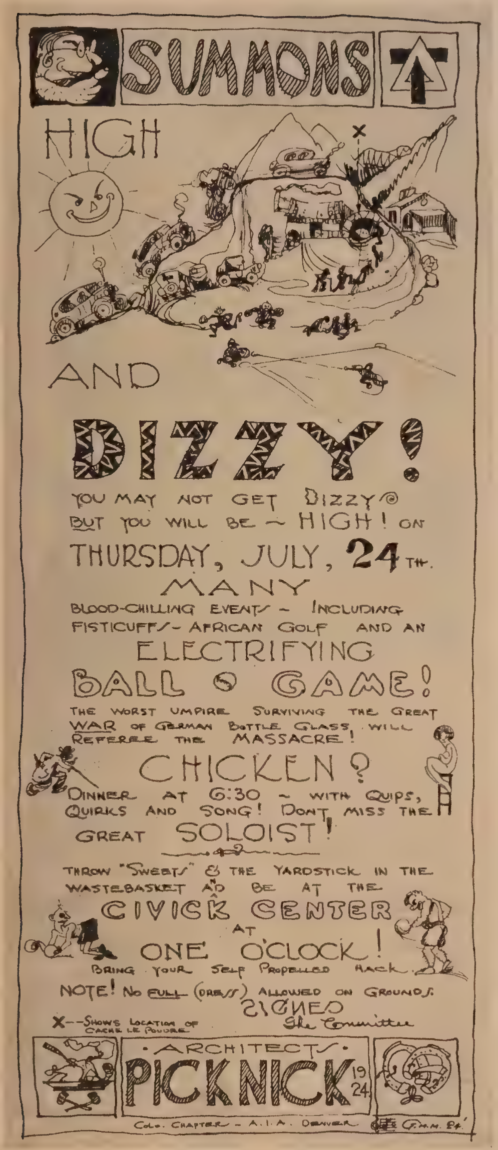
Mr. Coletti feels that he owes much to the late John Evans, John Singer Sargent and Thomas A. Fox and the Fine Arts Department of Harvard University.

COMPETITION OF HOUSE BEAUTIFUL COVER DESIGNS

THE success of the cover competitions held the last two years, has led the House Beautiful to repeat this event and again to offer two prizes, one of $500 and one of $250 to the successful contestants. A number of honorable mentions will also be given. The competition closes February 7, 1925. Full particulars regarding the competition may be had on application from the Competition Committee, House Beautiful, 8 Arlington Street, Boston, Mass.

THUMB TACK CLUB OF DETROIT

THE THUMB TACK CLUB OF DETROIT will hold its Fourth Annual Architectural Exhibition at the Detroit Museum of Arts, November 17th to 30th, inclusive. Inquiries regarding the exhibition should be addressed to Clair W. Ditchy, General Chairman, 324 McKerchey Bldg., Detroit, Mich.



SUMMONS

HIGH AND DIZZY!

YOU MAY NOT GET DIZZY BUT YOU WILL BE ~ HIGH! ON THURSDAY, JULY, 24TH.

MANY BLOOD-CHILLING EVENTS ~ INCLUDING FISTICUFFS ~ AFRICAN GOLF AND AN ELECTRIFYING BALL GAME! THE WORST UMPIRE SURVIVING THE GREAT WAR OF GERMAN BOTTLE GLASS, WILL REFEREE THE MASSACRE!

CHICKEN? DINNER AT 6:30 ~ WITH QUIPS, QUIRKS AND SONG! DONT MISS THE GREAT SOLOIST!

THROW "SWEETS" & THE YARDSTICK IN THE WASTEBASKET AND BE AT THE CIVICK CENTER AT ONE O'CLOCK! BRING YOUR SELF PROPELLED HACK.

NOTE! NO FULL (DRESS) ALLOWED ON GROUNDS.

SIGNED
The Committee

X--SHOWS LOCATION OF CACHE LE POUDRE

·ARCHITECTS· PICKNICK 1924

COLO. CHAPTER - A.I.A. DENVER

G.M.M. 24'

The "Summons" reproduced above was drawn by G. Meredith Musick, Architect, of Denver, Colorado.

THE ARCHITECTURAL CLUB OF NEW HAVEN

AMONG the several activities of The Architectural Club of New Haven, Inc., plans for its sixth annual exhibition are claiming much attention. The exhibition will again be held in the Trumbull Gallery, Yale University, and will be opened to the public February 14th.

While there has been a steady development and corresponding increase of public interest in the club's shows from that of its first humble beginning, the plans of the 1925 Exhibition Committee provide for a program which will indicate progress of signal importance.

At the conclusion of this exhibition the Leoni W. Robinson Memorial Medal for excellence in architecture will be awarded for the first time. The award will be made to a Connecticut architect who is a resident of and whose principal office is in that state, and will be made on his work as shown in this exhibition. The jury of award is made up of the following named members: Major George H. Gray, chairman: Edward B. Caldwell, Jr., Bridgeport; Charles E. Cutler, Westport; W. F. Brooks, Hartford, and Dean Everett V. Meeks, School of the Fine Arts, Yale University.

The committee of which R. W. Foote, New Haven, is chairman has commissioned Louis I. Gudebrod, sculptor, of Meriden, to model a bas-relief portrait of the late Mr. Robinson, the club's first president, which is to be cast in bronze, and from this the memorial medal will be made. Mr. Gudebrode, who was for years with St. Gaudens, is a member of the club and has a long-established reputation for his success in portrait sculpture.

In connection with this exhibition also, the 1925 Exhibition Committee will conduct a prize small brick house competition. The competition will be open to all Connecticut architects and architectural draftsmen of at least one year's practice in this state. Cash prizes amounting to $600. for this purpose have been generously provided by The Connecticut Brick Manufacturers Association and this sum is to be divided into three awards of $300, $200, and $100, respectively.

The competition will be conducted under the rules of the American Institute of Architects and R. W. Foote of New Haven has been appointed professional advisor. The competition will begin November 1st, and will end February 1st, 1925. The purpose of the committee in conducting this competition is to stimulate an interest in the small house of architectural quality; members of the committee being committed to the idea that through the medium of the small house the best possible vehicle is provided of awakening the public to an intelligent appreciation of architecture.

Another feature of the club's next exhibition which will be of paramount interest is the section to be devoted to the showing of work of Yale men in architecture. It is

Water Color, Tower of St. Germain des Près by Edmund S. Campbell believed that this will be the first time a collection of this kind has ever been made for purposes of exhibition, and as it is well known, some of the leading architects of America have been graduated from this university, so such a show is certain to be greatly appreciated both by the Connecticut public and by the faculty and undergraduate body of the university. Already many Yale graduates prominent in the architectural profession have indicated their intention of sending their work to this section of the exhibition.

Not the least attractive features of the show will be the exhibiting of the results of the club's annual Yale Scholarship and Fontainebleau Summer School Fellowship competitions.

ARCHITECTURAL SOCIETY OF UNIVERSITY OF TORONTO

TO stimulate interest in the activities of the Department of Architecture and to keep in touch with the profession, the graduates and undergraduates of the University of Toronto have an Architectural Club. The executive offices of the club are held by undergraduates and an honorary president is elected annually from the staff or practicing architects.

The meetings of the club are held at frequent intervals in the form of informal dinners at which addresses are given by practicing architects and others of interest to the profession. The work done by the Department of Architecture during the year is exhibited annually by the club. Professor Eric Ross Arthur has joined the staff this year. Professor Arthur is an architect and designer of reputation in Europe and has been spending the summer months studying on the Continent with Sir Edwin Lutyens. The Department is very fortunate in having this addition to its staff.

THE DERBY MANSION

A VERY interesting account of the designing of one of the more elaborate of Early American "great houses" is given in Fiske Kimball's "The Elias Hasket Derby Mansion in Salem" just published by the Essex Institute, Salem, Mass.

The author points out that though the general plans, design of interiors, and detail drawings of the building are identified as Samuel McIntire's by his handwriting and signature, and there is no doubt that he was the architect of the building as executed, the design adopted had an interesting preliminary development and proves to owe very much to one whose name has never been connected with it hitherto—Charles Bulfinch.

The many drawings reproduced are especially interesting, including preliminary studies by Bulfinch, drawings by McIntire for the house under consideration and plates showing the sources of inspiration of features of the design of this house. It is a scholarly, readable and very enjoyable book.

OLD SHIPS

ARCHITECTS and draftsmen who are interested in old ships and in ship models, and their number is large, will be glad to know that Doubleday Page are soon to issue a notable work by Henry B. Culver, with illustrations by Gordon Grant, under the title "The Book of Old Ships." The book will be published at $20 a copy.

This book will supply much desired information and give much pleasure to those who have found interest in the articles on old ships that have been published in the last two issues of PENCIL POINTS and in the article on galleys and Viking ships in this issue. Letters have been received from a number of readers asking for the names of books on old ships, and to these and to all others interested in the ships of other days "The Book of Old Ships" with its illustrations will prove a most interesting work.

ATELIER CORBETT-KOYL

ATELIER CORBETT-KOYL has reached its quota membership in Class "A" and in Class "B" Projects. Only applications for membership as analytique will be accepted. Victor Pribil, Massier.

JOSEPH HOWLAND HUNT

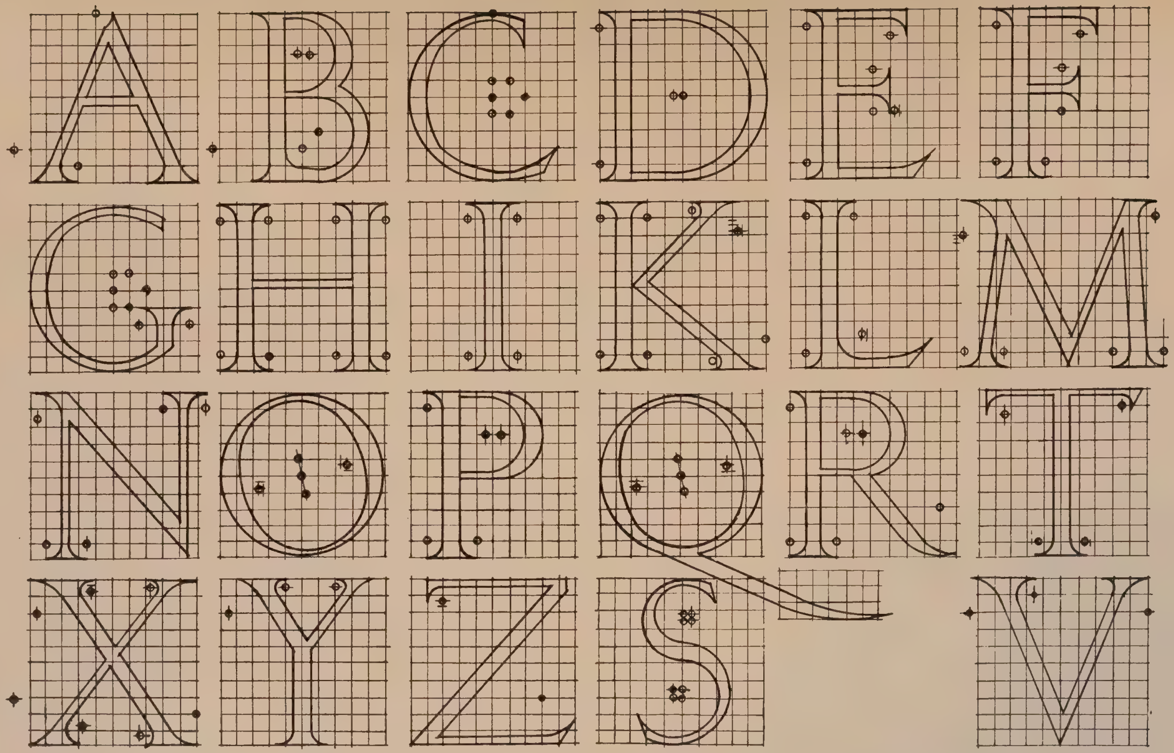
JOSEPH HOWLAND HUNT died on October 11, after a short illness. Mr. Hunt was born in New York City, March 6, 1870, and was a son of Richard Morris Hunt and of Catherine Clinton (Howland) Hunt. He was prepared for college at St. Mark's School, Southboro, Mass., attended Harvard 1888-1892, studied architecture at Columbia and for six years, from September 1894 to 1900, he studied at the Ecole des Beaux Arts in Paris.

Mr. Hunt married Mrs. Mazie Elizabeth LaShelle, daughter of William Henry Nadine and Mary Nadine, and they had one child, Joseph Howland Hunt, Jr.

While Mr. Hunt was abroad he traveled extensively in France and Spain. He returned to America in October, 1900 and was taken into partnership by his brother Richard H. Hunt, who had been associated with his father during the last eight years of the life of Richard Morris Hunt and had continued the practice of architecture after his father's death. In 1901 the firm of Hunt and Hunt was formed.

Among the architectural works of Hunt & Hunt, in which Joseph Howland Hunt was particularly interested were the following:—The Sixty-ninth Regiment Armory, New York; Alumnae Building at Vassar College, Poughkeepsie, N. Y.; Residence for F. J. Marion, Stamford, Conn.; Residence for Henry Sanderson, Oyster Bay, L. I.; Residence for Nelson Macy, Greenwich, Conn.; and buildings for the Tata Iron and Steel Co., at Jamshedpur, India.

Joseph Howland Hunt was a Director of the Municipal Art Society from 1916 to May 1924 and was President of the Municipal Art Society from May 1919 to May 1923. First Vice-president of the National Sculpture Society from May 1921 until May 1923. Secretary of the Fine Arts Federation from 1904 until 1916. Treasurer of the Architectural League of N. Y. from May 1912 until May 1914. A member of the American Institute of Architects; Society of Beaux Arts Architects; Municipal Art Society; Architectural League of N. Y.; National Sculpture Society and Metropolitan Museum of Art.



Alphabet by Geofroy Tory (1480-1533), Caligrapher to Francis I. Reprinted by request from Vol. 1 of Pencil Points.

JACQUES CARLU

JACQUES CARLU has arrived in this country and taken up his work in the School of Architecture at the Massachusetts Institute of Technology. The M. J. T. is very fortunate in having secured M. Carlu, who is one of the most able educators in the architectural field.

M. Carlu was winner of the GRAND PRIX DE ROME in 1920 and has been in Rome for the past four years. He has made as his *envoi* a very remarkable restoration of Rome in the Tuscan period.

M. Carlu studied in the Ecole des Beaux Arts, Paris, in the Atelier Duquesne and the Atelier Laloux and is regarded as one of the ablest men graduated from the school in recent years.

His skill with his brush is fully equal to that with his pencil. His vigorous personality, together with his thorough grounding in school principles, gives him an excellent background for his interest in modern problems and modern solutions, as distinguished from the stereotype *projet* that generally represents school training.

For the past two summers M. Carlu has been head of the American School of Fine Arts at Fontainbleau, where he won the confidence and affection of his students to a remarkable degree. He will retain that position for two summers.

PERSONALS

SAMUEL M. HITT, ARCHITECT, has moved his office to 114 West Tenth Street, Kansas City, Mo.

JOHN F. HOGAN has opened offices for the general practice of architecture at Rooms 314-315 Grosvenor Building, Providence, Rhode Island.

WALTER E. KELLY has opened an office for the practice of architecture at 513 Oregon Bldg., Portland, Oregon.

FREDERICK J. GRIFFIN, ARCHITECT, has recently built a large studio and office for his own occupancy at 301 Montclair Avenue, Newark, N. J.

FRANK GRAD, ARCHITECT, has removed his offices to 1023 Broad Street, Newark, N. J.

BROOKLYN CHAPTER OF THE A. I. A.

THE Brooklyn Chapter of the American Institute of Architects, Mr. Wm. H. Gompert, Pres., announces the forming of a Student Associateship with the Chapter open to men within its territory who may come properly recommended and who can qualify under any one of the following classifications:

(a) Any architectural draftsman, with at least three years' experience as such, *residing* in Brooklyn.

(b) Any architectural draftsman, with at least three years' experience as such, who is *employed* in Brooklyn.

(c) Any architectural draftsman, with at least three years' experience as such, employed by any member of the Brooklyn Chapter of the A. I. A.

(d) Any student who has satisfactorily completed at least two years' day work in any recognized school of architecture within the territory of the Brooklyn Chapter.

(e) And any student of architecture with similar training, living in Brooklyn and attending any recognized school of Architecture.

Details governing the forming of this organization (which has been under the direction of the Committee on Education of the Chapter for some months) as well as a proposed program will be printed in the next issue of PENCIL POINTS.

Mr. Lester B. Pope, of Pratt Institute, Brooklyn, N. Y., is Chairman of the Educational Committee.

ARCHITECTURAL EDUCATION

ARCHITECTURAL education is veering from tradition, stressing less both beauty and taste, according to Prof. William A. Boring, director of the school of Architecture of Columbia University, who in a special report to President Nicholas Murray Butler just made public, records his impressions of the International Congress on Architectural Education which recently closed its sessions in London.

American architects, Prof. Boring declares, are both artists and philosophers, comparable in their cultural associations to those of Greece and Rome. Planning he

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APPLICANT **Nº 500**

NEW YORK'S
PROPOSED ARCHITECTURAL CLUB

Your name has been received and will be indexed and filed pending the receipt of the full quota of two thousand (2000) names. This number has been arbitrarily fixed as a minimum by the Executive Committee of the League as indicating the proper percentage of the architectural men in New York City, with less than which it would be out of the question to attempt the organization of a club.

An account of our activities, as well as the progress of the Club, will be found from month to month in PENCIL POINTS.

HOTEL SHELTON
New York City

THE ARCHITECTURAL BOWLING
LEAGUE OF NEW YORK
N. T. Valentine, Secretary

calls the basis of architecture, saying that training demands sound knowledge of construction.

"The keynote of nearly all discussion impressed one as insistence on expression of modern ideas of physical needs of society, and of modern methods of construction," says the report of Prof. Boring, who is Treasurer of the American Academy in Rome.

"Insistence was recorded on expressing modernity. The need of beauty was not stressed, nor was the cultivation of taste made an issue. This is, no doubt, a healthy sign. The feeling that we are leaning too much on the use of good old forms which have been overworked, augurs something vital, but this idea alone cannot lead us to success in architectural design.

"Knowledge of structural materials and their uses, excellent craftsmanship, even good detail are not the broad basis of good design. To place these in the forefront of an educational scheme seems narrowing. The disposing of masses after analysis of the problem is more important. Planning in its broadest sense is the basis of architecture.

"This attitude of mind must be encouraged in our educational work. We must adhere to the larger aspect of design in instruction, including, of course, as a proper equipment, a sound knowledge of construction and good craftsmanship.

"At the risk of seeming narrow, I must say that the American exhibit seemed to me a sound expression of good design, when compared with the work of other countries.

"The teaching of architecture as an art in a well organized school seems to raise it into a higher plane than the combined efforts of the office and school working together, as followed by many schools.

"The time we have to instruct pupils is too valuable to devote to petty details of the business of an office. It seems better to inspire students to work for an ideal of beauty than to equip them to take positions as technical assistants in an office.

"Architecture as a profession should rank in the minds of the public as on a par at least with law and medicine. We cannot maintain it so by teaching the craft alone. We must turn out scholars who are masters of craft also. In America our architects of distinction move in the highest intellectual circles, as they did in Greek times. They are men of culture, of science, of good taste, and have a knowledge of building processes as well as of good design. In other words they are artists and philosophers.

"Much has been said about commencing early to learn architecture, and no doubt early familiarity with good buildings is an advantage. Our experience, however, shows that college bred men who come rather late to the study of architecture are the strongest men in our school. Learning to draw early is almost essential, and facility in this method of expression is a great advantage. Some have it naturally; others must acquire it; all must master it.

"But the art of architecture is greater than its expression on paper. Only a limited number of aspirants reach the plane of real architects. Schools should teach such subjects and in such a way as to bring out and develop the natural gift of the student.

"We must recognize that a person of great talent will succeed either in or out of a school, but he will have a better basic foundation for his work if he has good school training. A school should give him those things as basic ideas which he can learn in practice only by going through and rising above the maze of details.

"Four years is not enough time for a high school graduate to reach the proficiency represented by our degree. If a curriculum includes general education subjects, it should be longer than four years because the professional instruction alone requires at least that much time.

"The average student who has not advanced beyond high school grade is not sufficiently developed to properly approach the major subjects taught in a professional school.

"He can very well be taught by allotting six years from high school to diploma, on the plan of a combined course which begins by mixing the elementary subjects in his professional studies with his general college curriculum."

SELLING ARCHITECTURE.

THE "Selling of Architecture" has its roots far deeper than one would ordinarily suspect. Campaigns designed to arouse and educate the public interest in building construction with the need of good architectural service is a practical way of protecting the prospective owner against persons who fail to complete their obligations. There is no question in my mind that good architecture is generally appreciated in the larger cities, but it is not appreciated in the smaller cities because the majority of persons do not understand, are thoroughly ignorant, or are told that the professional services of an architect is an added and unnecessary expense. Because of these conditions, ninty per cent of the number of structures that are being built, are being built by so-called carpenter-architects, builders and realtors, and I can safely say that of this number seventy-five per cent are incompetent and irresponsible persons who conduct their business on narrow financial margins. Witness the large number of mechanics' liens filed each month, the large number of business failures, the huge loss in money suffered by the surety bond people, the material man, and the laborer.

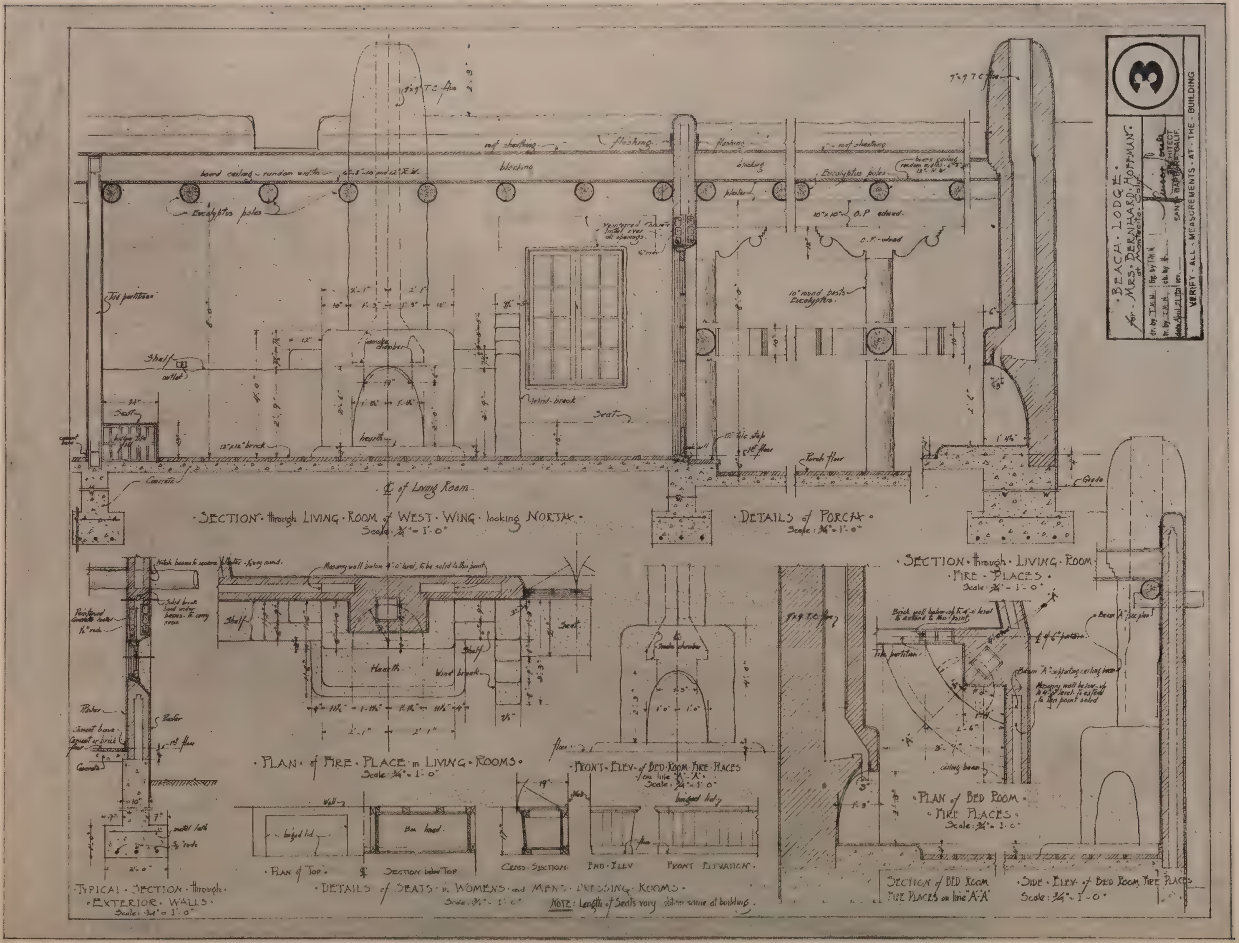
This is a distressing fact but nevertheless true, and I believe it is wrong for an architect to be forced on a competitive basis with this type of builder. It works a terrible hardship on the young architect to build up an honest reputation and some means should be found to protect the architect as well as the public.

If it can be shown that the prospective owner, the financier, the contractor, the material man and the laborer will be protected by certain legislation I have reason to believe that our case will be won. No doubt what I would suggest would appear startling in a way, but the more that it is studied and analized, the more reasonable it will appear. We are in need of legislation making it illegal for a building department to accept plans for construction amounting to more than ten thousand dollars in value which does not bear the stamp or seal of a certified architect. We are in need of legislation making it a felony punishable by severe penalties for mortgage people to advance building loans on structures that do not bear the seal of a certified architect. We are in need of legislation making it a felony punishable by severe penalties for contractors to practice without a registration permit from the building department showing that they have the proper qualifications and financial backing to do business. I say this not because it sounds good but because it is an actual fact that in the important centers of activity these very things are being talked about by the different sub-contracting organizations, by the builders exchanges, and the material men.

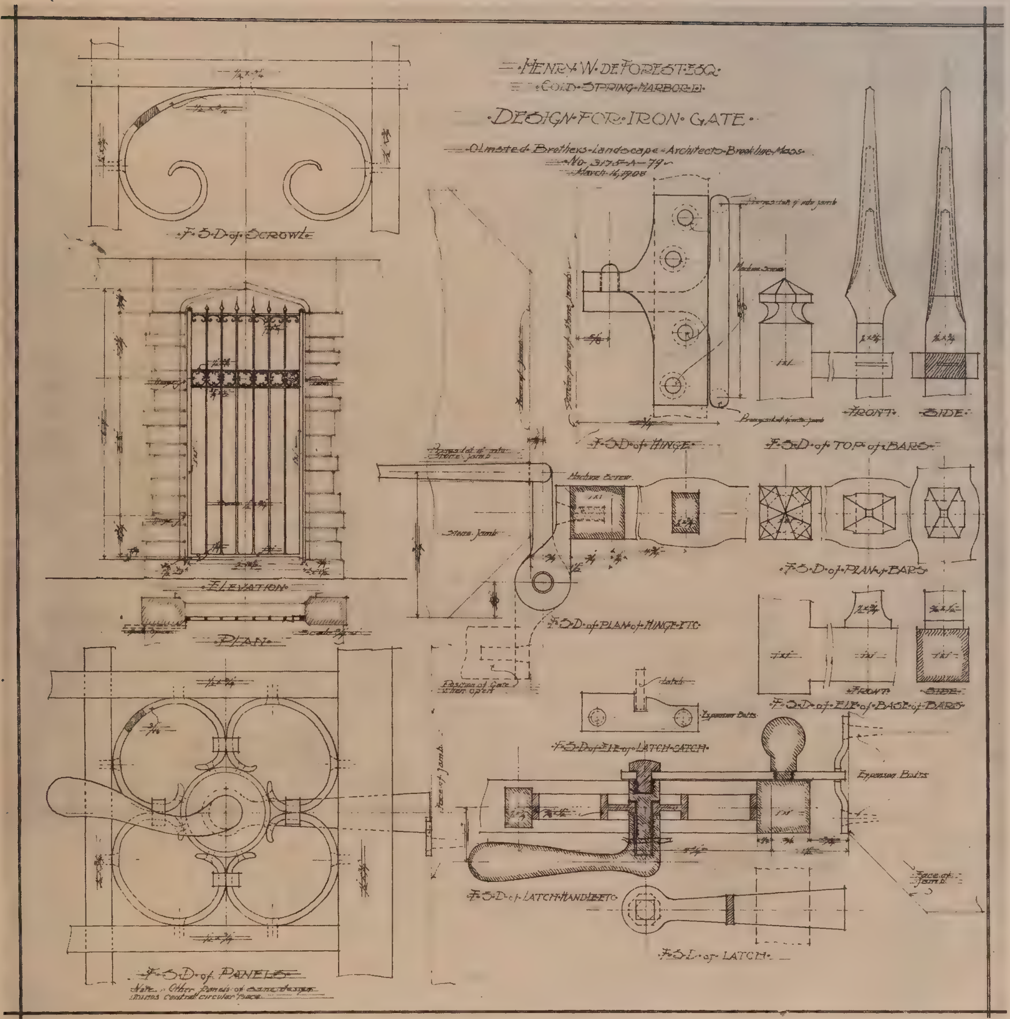
It is true that there is some agitation among the older architects, but this agitation is limited to the professional magazines. It is therefore necessary to carry on a vigorous public campaign supported by hard, cold figures, and I have no doubt but what the architects will get plenty of support provided they lay their case down on the table hard enough. The fellows who will cry that this sort of legislation is unfair are the fellows that are irresponsible and incompetent, are the promoters who manipulate funds, and are the weak architects who think that any noise is vulgar.

As I have said previously, many of the thoughts in this letter are not new, and I have taken this question up with the chief engineer of the building department of this city who was for it one hundred per cent. I can also show you resolutions adopted by the various subcontracting organizations in this city and if necessary can get statements from surety bond houses showing the huge losses experienced through bad investments. The passage of such laws as I have roughly outlined will save the public thousands of dollars that otherwise would go to unearned profits or capital financing and would be diverted to legitimate business tending to stabilize the building industry. This is the only salvation in my opinion for the architectural profession and I am glad that P. P's. has started the fire underneath the boilers.

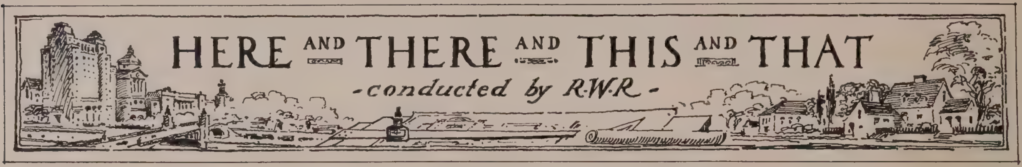
Respectfully,
LOUIS KORN.



Details of Construction—Beach Lodge for Mrs Bernhard Hoffman, at Montecito, California.
Winsor Soule, Architect, Santa Barbara, California.



*Details of Construction—Design for Gate for Henry W. DeForest, Esq., Cold Spring Harbor, L. I.
Olmsted Brothers, Landscape Architects, Brookline, Mass.*



HERE AND THERE AND THIS AND THAT

-conducted by R.W.R.-

THE heading reproduced above, placed fourth in the competition, was submitted by Mr. John P. Morgan of Pittsburgh.

The ten dollar prize for the best contribution to this department for October goes to William Moyer of Boston for his drawing entitled "The Draftsman's Dream," Come again Bill!

MR. W. C. CALLAHAN, Columbus, Ohio, one of our valued subscribers, does not like this department one little bit and says so like a man.

"I, as one of your subscribers, enjoy PENCIL POINTS, not thoroughly, however. Can you not spare us that department known as 'Here and There and This and That' with its cheer-leader enthusiasm and slang, its doggrel verse, and high-school cartooning? If it cannot be omitted I would suggest placing it at the middle of the magazine that it might be lifted out without damage to the valuable material.

"Really, as it is, I do not let my PENCIL POINTS be where friends can find it and this department for fear of losing their respect.

"It is as incongruous, shaming and disappointing as an idiot's shriek and grimace would be from a beautiful woman."

Now maybe a lot of other people don't like this department any better than Brother Callahan does. And if so please step up and say so just as frankly. Yes, we admit we have published some doggrel, but we are lowbrow enough to admit that much of it has amused us and so we passed it on to the rest of the folks, some of whom have been kind enough to say that it amused them. Slang? Yes, we admit that too. We think largely in terms of slang and when we lock the door and bring together the material to appear in each issue of PENCIL POINTS we write just as we think, and let the chips fall where they will.

But we don't want to hurt anybody's feelings and we don't want anybody to be ashamed of PENCIL POINTS and feel obliged to tuck it into the desk or cover it up with a bunch of papers when a caller comes in.

Let's stand up and be counted! Who likes this department and who doesn't? Brickbats are as welcome as bouquets.

Our thanks to Mr. Callahan.

SKETCHES and more sketches have been coming in increasing numbers from day to day for entry in the PENCIL POINTS SKETCH COMPETITION FOR 1924, so that by the time the competition closed, noon October 20, a quantity had been received that will give the jury plenty of work. We are greatly pleased with the enthusiastic response from widely separated places. The judgment will take place shortly and the results will be announced in the December issue.

THE mystery surrounding the identity of Oong Gow is beginning to clear up. To date our detective bureau is able to report that he mails his communications from Oakland, Calif., and we are confident that we will soon be in possession of his real name, local address, etc. And just as soon as we secure this information we will forward that ten dollar check coming to him for his verse printed in the September issue, and in the meantime here is another one which came in the mail this morning:

LAMENT OF A CASUAL

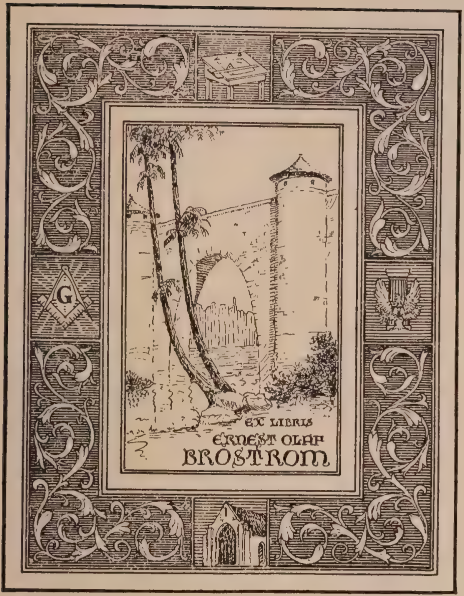
In this corral they like to dwell
In days gone by when Gink and Guy
Would sit and gloat,—another bloke
Had left the town!

But which would cheer when they would hear:
Some other man arrived to plan
On this same staff? Would either laugh?
Not Smith nor Brown.

These uncouth hicks would never mix
Nor compensate at proper rate
His work as soon as they gave at noon
The up and down.

OONG GOW.

AND now we have another mystery on our hands, and this time its all the fault of the careless editor of this department. Last month we received a sketch, reproduced below, signed L. E. C., and on a separate sheet was the name of the contributor. This got lost in the shuffle and we do not know to whom to credit it. Will the author kindly step forward so that we may print his name in the next issue of the paper?



HERE is a letter from our faithful contributor, Ernest O. Brostrom of Kansas City, which, together with a reproduction of the book plate mentioned, tells its own story. Rather a charming idea say we.

"Dear Mr. Editor:

"Last Xmas I was the recipient of an unusual gift from one of my draftsmen, J. Leland Benson. He presented me with a cut and proof of a very charming book plate.

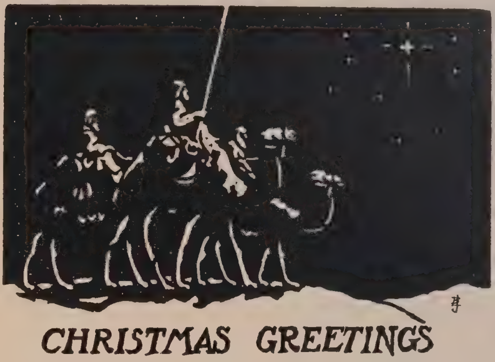
"I am sending herewith enclosed a copy of same, believing that it might contain some suggestion for some draftsman to give pleasure to his 'boss' in this very thoughtful and beautiful manner.

"It so happens that the name 'Brostrom' literally translated, means 'bridge-stream'. You will get the connection with the picture instantly.

"Mr. Benson did not tell me the significance of the arch nor of the turrets, neither did he indicate any special symbolism for the two lean foliage looking trees.

"The symbols in the borders explain themselves."

AND here comes the culprit himself, J. Leland Benson, with a reproduction of a linoleum block which he did last year and had printed as a Christmas card.



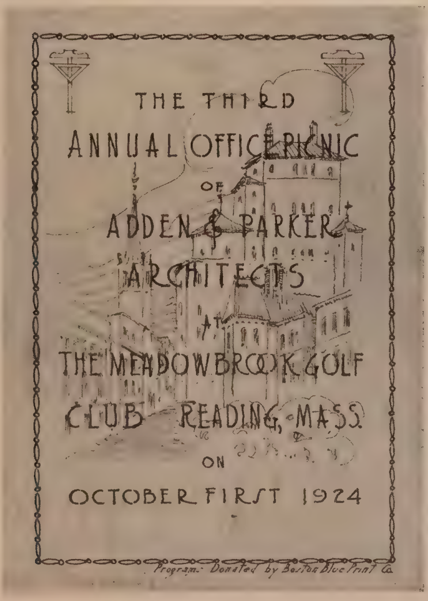
Here is what he says about it: "It was cut on a sample of linoleum left in this office by a salesman. It was then fastened to a wood block with Higgins' Drawing Board Paste and printed on an ordinary job press. Anyone who contemplates doing the same thing this year should choose the size more carefully than I did because I was forced to make my own envelopes."

We will pay 25c. each for copies of the July, 1924, issue of PENCIL POINTS delivered to this office in good condition.
THE PENCIL POINTS PRESS, Inc. (adv.)

LAUREN V. POHLMAN, architect, 58 Broad Street, Newark, N. J., desires to secure volumes 1, 2, 3 and 4 of the White Pine Monographs and Numbers 1, 2, 3 and 4 of Volume 9. He would like to hear from anyone desiring to dispose of these items.

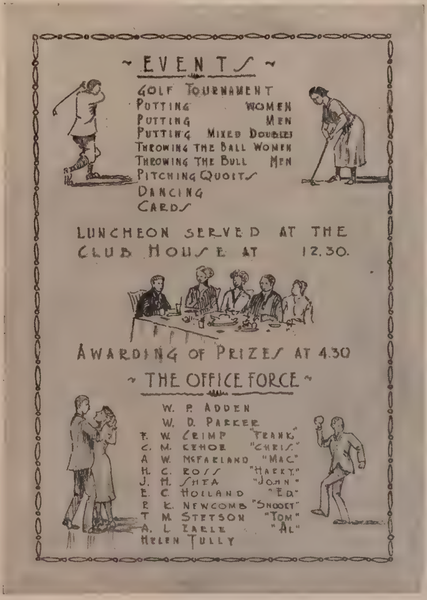
F. L. Brown, 537 Linden Street, Scranton, Pa., offers the following issues of PENCIL POINTS: December, 1921, all of 1922 except May and July, 1923 complete, 1924, January to September.

Thomas Raad, 44 Court Street, Brooklyn, N. Y., care Selig & Finkelstein, wants to secure copies of PENCIL POINTS for March and October, 1922.



THE THIRD
ANNUAL OFFICE PICNIC
OF
ADDEN & PARKER
ARCHITECTS
AT
THE MEADOWBROOK GOLF
CLUB READING, MASS.
ON
OCTOBER FIRST 1924

Program: Donated by Boston Blue Print Co.



~ EVENTS ~

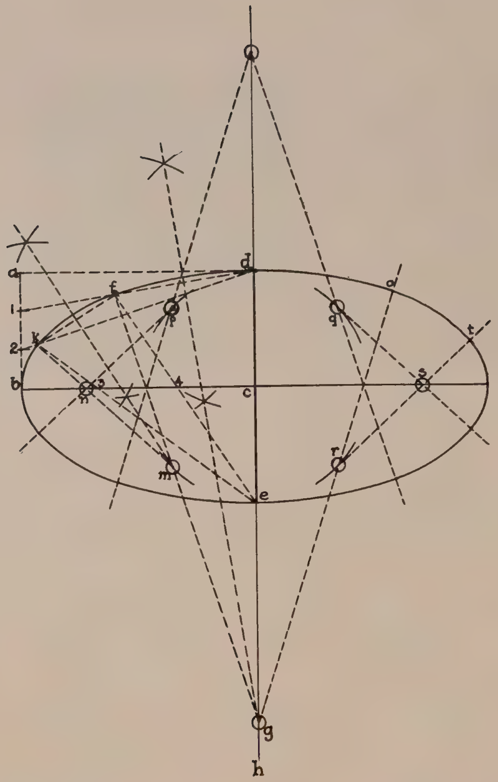
GOLF TOURNAMENT
PUTTING WOMEN
PUTTING MEN
PUTTING MIXED DOUBLES
THROWING THE BALL WOMEN
THROWING THE BULL MEN
PITCHING QUOITS
DANCING
CARDS

LUNCHEON SERVED AT THE
CLUB HOUSE AT 12.30.

AWARDING OF PRIZES AT 4.30

~ THE OFFICE FORCE ~

W. P. ADDEN
W. D. PARKER
F. W. CRIMP "FRANK"
C. M. KEHOE "CHRIS."
A. W. McFARLAND "MAC"
H. C. ROSS "HARRY."
J. H. SHEA "JOHN"
E. C. HOLLAND "ED"
R. K. NEWCOMB "SNOOKY"
T. M. STETSON "TOM"
A. L. EARLE "AL"
HELEN TULLY



EMIL MONIER of River Edge, N. J., sends us a neat little sheet showing a method for drawing an Ellipse. The diagram is reproduced herewith, the accompanying explanation, which was nicely lettered, being set in type to save space.

Draw the longitudinal and transverse axis as required. Draw lines a d and a b. Divide a b and b c into three equal parts. Draw 1d and 2d as shown, 3e and 4e prolonged to f and k. Bisect fd by a perpendicular line prolonged until it meets d h, giving the center of the arc f d at g. Draw f g and f k. Bisect f k by a perpendicular line prolonged to m giving the center of k f. Draw k m giving the center of b k at n.

For the three other sides: Draw a circle using c as a center and c m as the radius. Find centers p q r with the T-square and triangle. Draw g o through r and r t through s. That's all.

FROM THE OFFICE OF PIPER AND KAHRS

Long Beach, Calif.

ABOUT so often we have to "bust" into print, and following you will find several things about water colors that I have learned from artists, that will be of the greatest help to "archies"!

In damp countries—water colors in pans, when kept in a moist condition—ready for quick use—in the color box will mold. To prevent this get the ordinary gargling strength carbolic acid solution 10% carbolic, 10% alcohol, and balance water (I guess) and place about five drops of this on the dampening blotters, cloths or whatever is used to keep the colors soft.

Another one. When pans get too darned hard. Place open dried-out pans of color in Mason jar, together with a split potatoe, and a few drops of carbolic. They will soften up to the right consistency.

One more. Lost a peach of a brush once, due to moths; now I keep my oldest, most robust cob pipe in the brush vase along with the brushes. Mr. Moth gets within about six inches of the vase and falls over in a faint. When the pile of moths gets high, they are readily swept up, as the lack of consciousness on the moth's part is permanent.

Best one of all. To keep tubes of color from drying out. Dip the ends of the tube after using, in glycerine—just a wee drop, and screw back on, they will hold tight for years.

Yours till the tubes break,

NAT PIPER.

The St. Louis Architectural Club sent us on September 27th, a notice of their evening courses in architecture. This was too late for the October number and now the time for registration has passed, but we are printing it just the same to let our readers know about these courses and with possible reference to next year.

Washington University and St. Louis Architectural Club. Evening Courses in Architecture, beginning October 3, 1924. In the Club House, 514 Culver Way. Registration at the Club, September 27th, 2 to 5 p. m., and September 29th and 30th, 7:15 to 9:30 p. m.

Courses offered and fees for the entire year:

Architectural Drawing and Design, History of Architecture, Descriptive Geometry, Shades and Shadows, Perspective, Freehand Drawing and *Construction.

Any number of these courses may be selected by the student for an annual fee of $30.00. Payable in full in advance. Any single course, excepting design, may be taken for the annual fee of $15.00.

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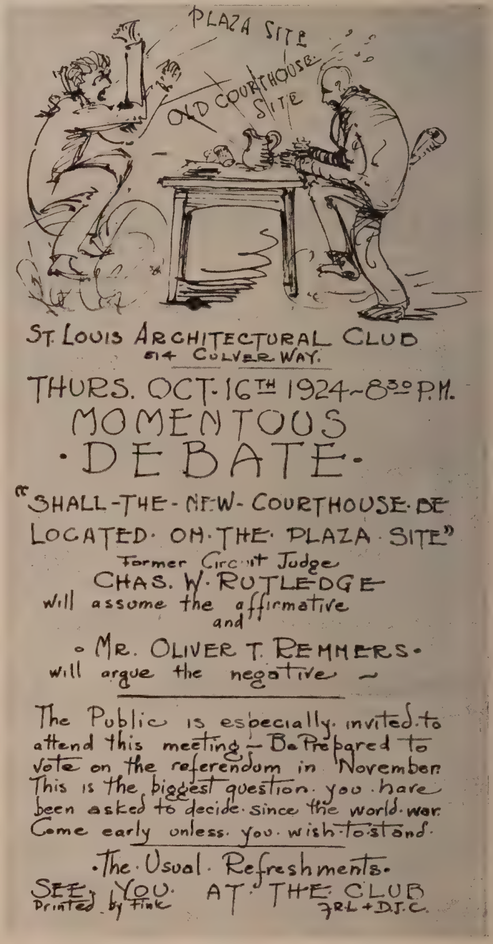
*A Life Class will be held on Monday evening; fee $20.00. Not given for less than twelve students.

For Further information call Prof. G. Ferrand, Washington University; F. Ray Leimkuehler, Chairman, Atelier Committee; Mauran, Russel & Crowell.


PLAZA SITE
OLD COURTHOUSE SITE

ST. LOUIS ARCHITECTURAL CLUB
514 CULVER WAY.

THURS. OCT. 16TH 1924~8³⁰ P.M.
MOMENTOUS
·DEBATE·
"SHALL-THE-NEW-COURTHOUSE-BE
LOCATED· ON-THE· PLAZA·SITE"
Former Circuit Judge
CHAS. W. RUTLEDGE
will assume the affirmative
and
· MR. OLIVER T. REMMERS·
will argue the negative —

The Public is especially invited to attend this meeting — Be Prepared to vote on the referendum in November. This is the biggest question you have been asked to decide since the world war. Come early unless you wish to stand.

·The·Usual·Refreshments·
SEE YOU· AT THE CLUB
Printed by Fink
FRL + D.J.C.

NEW YORK'S PROPOSED ARCHITECTURAL CLUB

THE EXECUTIVE COMMITTEE of the Architectural Bowling League of New York are keenly interested in the request of the editor of PENCIL POINTS for items describing the organization and growth of architectural clubs and the resulting response. These answers are coming in at an extremely psychological time for us.

To organize a club which will fill the needs of all Architectural men in the largest city in the world and its environs is a job which obviously cannot be turned out over night. Many worthy men have tried to put it over in years gone by but the history of their efforts usually showed that they had been handicapped by the activities of radical obstructions, agitators, seekers for personal glory, and labor organizers. A few of these last mentioned were undoubtedly men who truly and conscientiously felt that they were aiding their fellowmen by proposing By-Laws and other safeguards to save them all from becoming "slaves to capital" and other such high sounding phrases, but the most of them were just plain sore-heads. However, call them what you will, the fact remains that they always succeeded beautifully in throwing a monkey wrench into the works, with the result that the present day still finds our great city without a club.

Even today a few well meaning individuals have seen fit to criticise the present organization of bowlers which is sponsoring the club movement, because the same officers were elected for the second consecutive year. We would prefer constructive criticism from these good folks in preference to the destructive variety. As a matter of fact the Executive Committee of last year (to whom all credit is due for the great success of the League which resulted in more than doubling it in size this year) is still functioning and with its additional membership will continue like a good pilot to do so until they get our ship out of the harbor and safe beyond the rocks. So long as the rank and file of the men are satisfied with their services, and so long as there is a chance of chronic trouble makers taking the form of silver tongued orators (like the sirens of old to cajole less experienced men into steering on the rocks) they will try to give all that's in them to the end that the spirit of good fellowship in the Architectural profession which the Bowling League has stirred up, will not again perish from the face of our great city.

Bear this thought in mind always. It's a heluva big job and there's plenty of glory for all who will work conscientiously for the good of their fellowmen.

We want a club house—a home for our social and athletic activities as well as proper quarters for our great New York Ateliers, and the sooner everybody grabs a pick or shovel and goes to work instead of worrying about who's getting the more or less doubtful publicity for conceiving the idea, the sooner that club house will be built.

Postal cards, a fac simile of which is reproduced in this issue, are being sent out as rapidly as possible to all prospective members.

The bowling tournament is now in full swing at the Shelton, every Monday, Wednesday and Friday from 6:00 to 10:00 p.m. and the pleasant surroundings of this most splendid of modern club hotels is already reflecting itself on the imagination of the men and spurring them on to work for a club of their own.

Mr. Lloyd H. Smith of WARREN & WETMORE team holds the high score at the present writing of 225, but he will have to top that if he wants to keep the honor, for there are a fine lot of crack bowlers out to take his scalp.

The dates of our proposed games with the Detroit League will be announced in the December issue of PENCIL POINTS.

Saturday afternoon, October 18th, saw the defeat of our baseball team by only one run by the team of the Mutual Welfare League, Sing Sing Prison. The score was 4-3. Our opponents are indeed deserving of their title, "The Leading Intra Mural Semi Pro Team of the World." Of 109 games played they won 81, lost 23 and tied 5. A very good record when one takes into consideration the fact that many of those 23 games were lost to such teams as the N. Y. Giants, 11-4, N. Y. Red Socks, 10-3 and other professional teams.

Considering the small amount of practice our boys have had together as a team, owing to the short time of their organization, even the most uninitiated could see the possibilties of an unusually fine team for next season.

It was indeed a red letter day for the Architectural Bowling League of N. Y., under whose auspices the baseball team has functioned, and as the one hundred and twenty-five Fans and Fannies who went up from the city shouted their approval of the splendid team work which our boys displayed, President Capel, flushed and happy, beamed his well earned satisfaction. Once again the Bowling League was responsible for a gathering of architectural men in the bonds of fellowship, this time accompanied by their wives and sweethearts on a twenty-five mile jaunt out of the city.

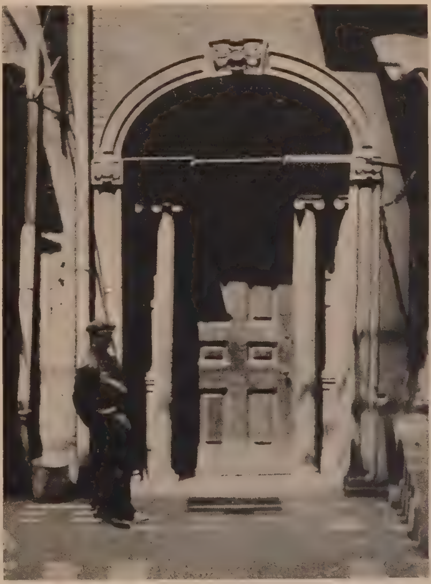
Herrick guarded 1st base like a veteran and with his cool, deliberate catches, clipped the wings of many ambitious one-baggers. Shouldn't be surprised if we heard a lot from that young fellow next year. Early and Keppler, pitcher and catcher, respectively, worked in that perfect unison which one might see in a well made machine and it was a pleasure to watch them.

Anderson, our stalwart blonde short-stop, was given credit by the pitcher of the opposing team for being able to find every ball that he could send over, and his two drives over the left field wall were the home-run sensations of the game. This feat has only been accomplished three or four times during the entire season. When it comes to foot work though we will have to hand the laurels to Forester. Every right field drive found him right on the job, picking them out of the ozone as easily as plums off a tree. He not only got under them but he also knew how to hold on to them for the required length of time.

Well take it all in all, Pop Scheffer can certainly feel proud of his boys. Every one of them worked hard and well to bring that game home to us, and the other members of the Architectural Bowling League owe Mr. Scheffer a vote of thanks for his work in getting such a splendid team together.

N. T. VALENTINE,
Hotel Shelton, N. Y. City. Secretary.

J. J. TUBBY, architect of our town starts an interesting little thought in submitting a snapshot of an old New York doorway taken under the elevated structure on Greenwich Street, near Trinity Church. It is reproduced herewith:



Now with sketch pad or pocket camera we can pry into lots of out-of-the-way corners and drag out into the light of day interesting bits that have heretofore escaped publication.

THE SPECIFICATION DESK

A Department for Specification Writers

STEEL COLUMN BEARINGS FOR REINFORCED CONCRETE GIRDERS, BEAMS AND SLABS

By Otto Gaertner

THE more extensive use of reinforced concrete for buildings makes it more and more necessary to study out ways of overcoming difficulties in connection with increases in the sizes of girders, beams, etc., over the sizes used in structural steel and timber work. Reinforced concrete beams and girders must necessarily be large and clumsy in order to overcome the shear in them at their supports; and the larger the girder is the larger must be the bearing surface which supports it. The architectural requirements often limit the depth of the girders causing them to be wider in order to be of the desired value. This would again cause the size of the bearing to be increased to more than would ordinarily be needed for economy. The architectural requirements may be the head room required, the proportions of girder required for appearance, the absence of ceiling furring, or the proportions of girder required to permit the installation of some parts of the mechanical equipment.

The mechanical equipment and other requirements are most troublesome in high class fireproof residence work and in some of our institutional work, commercial buildings usually having spaces especially provided for concentrated mechanical equipment and generally not being so exacting from the architectural point of view. Therefore, it is in such buildings as first mentioned that reinforced concrete girders and beams must be supported without the supporting bearings occurring on the columns being apparent. In such buildings also the architectural requirements would demand that the columns be made as small as possible in cross section to enable them to be placed within partitions and to economize in space. For this reason the columns are not made of reinforced concrete but of steel fireproofed with concrete and the load must be transmitted directly to the steel column. Such columns may be built up of two angles placed in the shape of a cross with equal legs and fastened together by means of plates spaced vertically as may be required and riveted to the legs of the two angles alternatingly, one leg of each angle being riveted to each plate.

Also the columns may be rolled H columns, or they may be built up of plates and angles, or other rolled sections to any required strength. Sometimes a cast iron core is used, but although it is more economical than steel it is not so dependable and does not lend itself so easily to providing girder bearings. When the concrete covering is made heavy enough it may take part of the load, the whole acting like a reinforced concrete column. It is seldom however that the concrete covering of these columns is made to receive any of the load, the steel generally being figured to take it all, especially that of the reinforced concrete girders and beams. Of course the smaller the column sections the more difficult it is to cover any steel girder bearings fastened to them and it is generally in the buildings where the smaller sections occur that it is most important to hide them. They may be hidden in furred ceilings, in the concrete column covering if it can be made thick enough they may be hidden in ornamental caps at the tops of the columns, or they may be hidden by building them into the girders enough to be covered. In commercial buildings, moulded ornamental caps generally occur on columns and they may readily be made large enough to cover the beam supports since these columns are generally large on account of the superimposed loads.

Beam bearings may be cast as part of the cast iron columns, but this may be expensive on account of the varying conditions that may occur, necessitating numerous patterns. In connection with steel columns, the bearings are made of plates and angles. This is easily done when the beam centers on a column, but when that is not the case a plate must first be fastened to the column to get the necessary offset.

There are several ways of making the bearings. Their size and stiffness depend on the load which they must sustain. Since angles may be had up to eight inches, a bearing surface of eight inches in a simple bearing or bracket may be had. At the same time the thickness of the metal is often sufficient to prevent the bracket from bending without complicating it by adding stiffness. Such a bracket, riveted to the column with one leg turned up and one turned out to form the bearing surface may be entirely encased by the beam which it supports and by the fireproofing on the column without increasing their thicknesses. Another type of bracket consists of an angle applied as above with another angle riveted to the column and to the above angle with its one leg turned down and its other leg turned out. The thickness of the bottom leg together with the projection of its rivet heads must be added to the thickness of the fireproofing on the side of the column on which it occurs. The bearing surface may be increased by placing a flat plate on the upper angle, so that the plate will project beyond the bearing surface of the angle.

Another type of bracket is made by taking an angle and cutting of a center section of one of its legs so that the angle may be bent into a U shape. The leg of the angle which has not been cut is the one that projects from the column and forms the seat for the beam. The angle is riveted to the column through the two remaining portions of the leg of which the center portion has been cut out. Since the cut out portion of the leg occurs at the bottom and the two remaining portions form the vertical legs of the U and occur on the inside of the U, there is no part of the bracket which necessitates increasing the fireproofing on the beam or on the column in order to cover in. In buildings that are not strictly fireproof and where no building code demands a minimum thickness of fireproofing, the fireproofing is sometimes skimped upon for economy so that in the one angle bracket mentioned above the bottom leg and rivets are covered in with a little less fireproofing than is the column itself. The above brackets are the ones that should be used if possible both for economy and for appearance. If the bracket must be offset from the center of the column so that a plate or angle bracket must be riveted to the column to receive the bracket to support the concrete beam, care should be taken to design it so that it may, if possible, be hidden in furring or in a partition. In a beamless and girderless reinforced concrete floor system similar brackets to the first two may be used, but of course they must be placed on all sides of free standing columns. Such systems are generally used in connection with commercial buildings where the floor loads are heavier and the brackets must necessarily be heavier and stiffer. In such buildings however, the upper parts of the columns may be flared out to form plain, moulded, or ornamental capitals which can hide the necessary stiffening angles of the brackets.

KEEPING BUILDINGS DRY

By Cecil Fidler

THERE is no doubt that in the past the importance of flashing in building construction has not been fully recognized. It has long been the custom to flash gutters and to use flashing at the junction of roofs and parapets, but it is only recently that designers and owners of buildings have begun to realize the necessity for flashing the entire upper and rear surfaces of exposed architectural features. It is now becoming evident that more attention must be paid to the protection of parapets and copings, the top of cornices and the floors of balconies.

An extensive examination of buildings erected in the last thirty years shows conclusively that the saturation of cornices and parapets is a very prevalent condition. In some cases the water enters at the mortar joints in the top of the coping. In other cases rain beats in and soaks in at the joints in the back of the parapet wall. Very frequently the mortar joints in the wash of the cornice are so cracked and porous that water that runs down the parapet or falls on the top of the cornice finds its way into the interior of the wall.

Many architects and owners find that they have been placing too much reliance on the mortar joints. Having procured weatherproof building materials, such as terra cotta or hard stone, and having specified mortar of tested ingredients and approved mixture, they supposed that their buildings would be water-tight when erected. They are now finding that a great many buildings are not water-tight and on searching for the cause, they usually discover that the water is getting in at the mortar joints in the wash of the cornice and parapet coping.

At first glance it might appear that by carefully caulking or grouting the joints in the wash of cornices, parapets and balconies, it should not be very difficult to make them water-tight, but the present condition of a great many of these features proves that for one reason or another, water-tight joints are not being obtained. This condition may be attributed to a variety of reasons, as for instance, poor workmanship, poor mortar, disintegration by frost, or cracking of joints due to thermal expansion and uneven settlement.

Many kinds of elastic cement and various caulking compounds for the protection of mortar joints are on the market and some of them remain impervious and somewhat elastic for several years but none of them appears to retain its original qualities indefinitely. Protection by means of caulking compounds involves periodical examination and considerable maintenance.

The results of poor joints are far reaching. The most common visible damage due to leaky joints in washes is unsightly staining and streaking on the face of the building. This staining and streaking is often extensive enough to destroy the beauty of a costly building. Frequently the streaks and discolorations clearly indicate that soluble portions of the mortar are seeping out at the beds and joints and are being deposited on the face of the building. Such a condition as this, if allowed to continue, will rapidly bring about the disintegration of portions of buildings on which it occurs.

Another serious result of leakage at joints is damage to plaster ceilings and walls within the building. Cases have been known where water entering at leaky joints in the washes of cornices and parapets has penetrated the walls to the depth of several stories below, causing considerable damage to the paint and plaster on the inside of the walls.

A still more serious condition, worse because it is out of sight, is the effect of dampness on steel framework within cornices, balconies and balustrades. The presence of moisture leads to rapid corrosion of the steel members and may eventually render projecting features unsafe.

Architects and owners of buildings have also to consider the damage that is caused by the freezing of water that collects in pockets and open spaces in the interior of walls and structural features. The expansion of ice repeated through a number of winters may finally rupture the masonry.

As impervious joints are difficult to obtain and expensive to maintain and as neglected leaks result in damage to valuable buildings, it is advisable to cover wash surfaces with an impervious and permanent coating. Sheet metal is a suitable material for this purpose.

Flashing should be carried entirely over the top of cornices and in most cases should be turned down over the nib far enough to form a drip and allow the water that runs down the wash to fall clear of the moldings. In this way the face of cornices may be kept clean and free from stains of any kind. When the top of a cornice is flashed, it is advisable to carry the flashing entirely through the base of the parapet and connect it with the cap flashing at the back of the wall. In this way water which enters at the top of the parapet is prevented from getting down behind the flashing at the back of the wall and is also prevented from getting underneath the flashing on the top of the cornice. The backs of parapets should be flashed whenever possible and the flashing should be carried over the top of the wall, laying it in the bed joint immediately below the coping. Then, if there is any leakage at the joints in the wash of the coping, the water cannot get behind the flashing, as it often does when the flashing is applied only to the back of the wall.

The unsightly discoloration that is so much in evidence on the underside of balconies indicates the necessity for better protection of these features. It is almost impossible to make the deck of a balcony water-tight by means of a cement or tile finish. A covering of sheet metal should be used in all cases. In flashing the tops of balcony slabs with sheet metal it is necessary to run the flashing out to the nib if the best results are to be obtained. Quite frequently the floor of a balcony is properly flashed, but the flashing terminates in raglets in the base of the balustrade. This practice almost invariably results in the saturation of the balcony slab by water which finds its way in at the joints in the balustrade and runs down behind and underneath the flashing. By carrying the flashing underneath the base course, water that enters at the joints of the balustrade cannot penetrate to the balcony slab, and the soffit of the balcony is kept dry and unstained.

The washes of pediments and dormers should be completely flashed if staining and other evils of saturation are to be avoided.

While the use of sheet metal for the protection of mortar joints in washes may entail some slight additional expense at the time of the erection of the building, it will be found more economical in the end because the cost of maintenance will be avoided. Moreover, a building that is properly protected at the beginning will retain its original beauty and value.

PUBLICATIONS OF INTEREST TO THE SPECIFICATION WRITER.

Any publication mentioned under this heading will be sent free, unless otherwise noted, upon request, to readers of Pencil Points *by the firm issuing the publication. When writing for any of these items please mention* Pencil Points.

Eight Periods and their Modern Adaption—Illustrated brochure showing some of the principal periods of interior decoration adapted to modern usage, with specifications for the finish of woodwork and fixed decoration. Italian Renaissance, Tudor and Elizabethan, Jacobean and Stuart, William and Mary, Queen Anne, Adam, 18th Century French and American Colonial are covered. 50 pp. 8½ x 11. Murphy Varnish Co., Newark, N. J.

The Waterproofing Handbook, 6th Edition. — Covers subject of waterproofing as applied to modern building construction. Specifications and complete data. 72 pp. 8½ x 11. General Fireproofing Co., Youngstown, Ohio.

Ancient and Modern Stucco.—Brochure with color plates covering history of stucco and its modern application. 32 pp. 8½ x 11. National Kellastone Co. 155 E. Superior Street, Chicago, Ill.

Published by the same firm, Walls that Endure, covering in general the subject of treatment of interior wall surfaces. Illustrations showing textural effects. 28 pp. 8½ x 11. Specifications for Stucco Work, a comprehensive specification with detail drawings covering the subject. 16 pp. 8½ x 11.

Drawing Materials.—General catalog No. 11 covering everything required in the drafting-room, with new list prices. Fully indexed, cloth bound, 400 pp. 6 x 9. Eugene Dietzgen Co., 166 West Monroe Street, Chicago, Ill.

Specimens of Bronze Work.—Brochure showing bronze name plates, tablets for business buildings, memorials, etc., and a selection of architectural bronze features suitable for banks and many other types of modern building. 32 pp. 7½ x 9½. Chicago Architectural Bronze Co., 4740 No. Clark St., Chicago, Ill.

Paint and Varnish Products.— Catalog No. 53 covers in concise form complete line of paints, varnishes, stains and enamels for all uses. Complete directions, specifications, suggestions, etc. 110 pp. 6 x 9. Devoe & Raynolds Co., Inc., 103 Fulton St., New York.

Beautiful Birch.—Brochure in Sepia with color plates showing application of this wood to many conditions and various types of buildings. 32 pp. 9 x 12. The Northern Helmlock & Hardwood Mfrs. Assn., 512 F.R.A. Building, Oshkosh, Wis.

Published by the same firm, Hard Maple, companion volume to the above covering Maple for various uses. The official statistics of strength (compression, shearing and tension) of American hardwoods—also beam-tests, impact-bending; comparative weights of hard and soft woods, etc., are shown graphically and authoritatively. 60 pp. 9 x 12.

Lodge Furniture.—Illustrated booklet covering both fixed and movable seating suitable for all types of Lodge rooms, auditoriums, etc. 24 pp. 8½ x 11. American Seating Co., 14 East Jackson Blvd., Chicago, Ill.

Waterproofing Concrete.—Treatise with specifications and blue prints setting forth the uses and advantages of Hydrolithic, a liquid concrete waterproofer. 32 pp. 8½ x 11. The Vitrifyx Co., 612 W. Kinzie St., Chicago, Ill.

Published by the same firm, Vitrifyl, companion volume to the above on the subject of waterproofing wood floors.

Boca Solid Steel Sash, Catalog F-24.—Many sectional drawings and much data on the subject of windows and window hardware showing application in many types of buildings. 36 pp. 8½ x 11. Bogart & Carlough Co., Paterson, N. J.

Furnishings, Equipment and Supplies for Public Service, Catalog E-26.—All types of supplies required in the hotel, club house, restaurant, etc. 318 pp. 8½ x 11. Albert Pick & Co., 208 W. Randolph St., Chicago, Ill.

Artists' Materials, Catalog F.—Covers wide range of supplies and equipment for artists and draftsmen. 132 pp. 6 x 9. B. K. Elliott Co., 126-6th St., Pittsburgh, Pa.

Metropolitan System for Floors and Roofs.—Illustrated Handbook with detail drawings covering floor and roof construction. 52 pp. 8½ x 11. Keystone Gypsum Fireproofing Corpn., 1328 Broadway, N. Y.

Automatic Storage Systems.—Illustrated treatise on equipment suitable for large residences, apartment buildings, hotels, hospitals, gymnasiums, etc. Sectional drawings and details, complete technical data with specifications. 32 pp. 6 x 9. Ruud Mfg. Co., 291 Smallman St., Pittsburgh, Pa.

Suggestions for Architects and Their Clients.—A series of sheets in color showing installations of high-class equipment for the bathroom. Suggestion No. 5 has just been published. Crane Co., 836 So. Michigan Ave., Chicago, Ill.

Windows for Better Built Homes.—Brochure illustrated in color showing all types of windows suitable for the modern residence. 24 pp. 5 x 7. Curtis Companies Service Bureau, Clinton, Iowa.

Waterproofing Methods and Materials.—Basic specification, detail drawings and much useful technical data on the subject of modern waterproofing. 32 pp. 8½ x 11. Gardiner & Lewis, 30 Church St., N. Y.

Revent and Drainage Fittings, Catalog F.—Covers F & W line completely. Handy pocket size. The Central Foundry Co., 41 East 42nd St., New York.

New for Old.—New booklet on the subject of remodeling old buildings. Profusely illustrated. Specifications and detail drawings. 24 pp. 8½ x 11. Atlas Portland Cement Co., 25 Broadway, New York.

Furnishings for the Fireplace by Mr. B. F. Annis.—Attractive booklet showing designs of andirons and other fireplace accessories conforming with the important periods from the year 1400. English, Italian, Spanish, French, German, Flemish, Dutch and American Colonial are covered. 24 pp. Chattanooga Roofing and Foundry Company, Chattanooga, Tenn.

Just Inside Your Threshhold.—Just off the press. Artistic booklet dealing with floor design patterns, and containing much useful data on widths, thickness and other matters dealing with correct flooring practice. 24 pp. E. L. Bruce Co., Memphis, Tenn.

Bath, Shower and Lavatory Fixtures, Catalog S.—Loose-leaf portfolio illustrating and describing complete line, together with necessary specification data. 36 pp. 8½ x 11. Goetz Brass Co., 630 No. Franklin St., Chicago, Ill.

Milcor Architectural Sheet Metal Guide.—Covers roofing, ceilings and other sheet metal items presented in an attractive and helpful manner. 64 pp. Milwaukee Corrugating Co., 3rd Ave. & Burnham St., Milwaukee, Wis.

Devoe Brushes.—Complete catalog of all types of brushes used in the studio and drafting-room. 164 pp. 6 x 9. Devoe & Raynolds Co., 101 Fulton St., N. Y.

The Ventadoor.—Data sheet describing a ventilating panel for doors. Detail drawings with specifications. 8½ x 11. Van Zile Ventilating Corp., 280 Madison Ave. N. Y.

"White" Efficiency Homes.—A. I. A. classification 35-N-9. Attractive brochure illustrated with twenty original residence designs with elevations and floor plans of each. Description of "White" Space-saving Devices. 32 pp. 8½ x 11. The "White" Door Bed Co., 130 No. Wells St., Chicago, Ill.

Wagner Data Book.—Catalog No. 19. Contains illustrations and descriptions of door hangers and tracks for overhead carrier systems, fire door fixtures and hardware specialties. Section and detail drawings and complete data for specifying. 176 pp. 8 x 11. Wagner Mfg. Co., Cedar Falls, Iowa.

Built-Up Roofing for Modern School Buildings.—A. I. A. standard classification 12B14. Booklet covering subject illustrated by 50 examples of modern school structures of various types and sizes. Specifications and other useful data. 36 pp. 8 x 11. Philip Carey Co., Lockland, Cincinnati, Ohio.

China Bathroom Accessories.—Catalog F.—Illustrates and describes complete Fairfacts line including medicine cabinets and price lists. 16 pp. 3½ x 9. The Fairfacts Co., Inc., 234 West 14th St., N. Y. C.

Published by the same firm, "The Perfect Bathroom" describing most modern conveniences and necessities. Uniform in style and size with above.

Distinctive Houses of Indiana Limestone.—Volume 12, series B. Illustrated brochure showing wide range of residences designed by many architects interpreted in limestone. 50 pp. 8½ x 11. Indiana Limestone Quarrymen's Assn., Box 784, Bedford, Indiana.

Columns Handbook.—Valuable data on steel and concrete construction diagrams, tables of strength, specifications, detail construction, drawings, tables of safe loads, etc. Handy pocket size, 80 pp. Leatherette binding. Lally Column Co., 334 Calyer St., Brooklyn, N. Y.

Saving Home Construction Costs.—Technical booklet on this important subject. Long-Bell Lumber Co., R. A. Long Bldg., Kansas City, Mo.

Architects' Handbook.—Illustrated with blue prints showing methods for using and installing Sani Onyx in bathrooms, and for many other uses. Specifications. 36 pp. Marietta Mfg. Co., Indianapolis, Ind.

The Gospel of Fresh Air.—8th Edition. Covers subject of ventilation and ventilators for all types of buildings. Much specification information and technical data. 36 pp. 8½ x 11. The Swartwout Co., Cleveland, Ohio.

Sash Cord Specifications.—Data sheet with information and specification forms covering sash cord in all uses with recommendations for various requirements. Standard filing size. Samson Cordage Co., 88 Broad St., Boston, Mass.

Lighting Service for Banks and Insurance Companies.—Catalog No. 425. Illustrates the type of equipment required in these buildings. Diagrams showing layouts and installation of fixed and portable lighting units. Much technical data on modern lighting. 32 pp. 8½ x 11. I. P. Frink, Inc., 24th Street & 11th Avenue, New York.

Brass Pipe for Water Service.—Bulletin B-1 monograph on the subject, typical layouts and valuable engineering data for architects, engineers and contractors. 8½ x 11. 32 pp. The American Brass Co., Waterbury, Conn.

Anderson Window Frames.—Illustrated booklet with drawings covering design and construction of window frames. 24 pp. 8 x 11. Andersen Lumber Co., Bayport, Minn.

Specifications and Working Details.—Covers stucco, stucco base, plaster base and insulating base. Instructions for mixing and applying, details, drawings and specifications. 8 full page plates. 20 pp. 8 x 11. The Bishopric Mfg. Co., 110 Este Ave., Cincinnati, Ohio.

Gold-Seal Treadlite Tile.—Handsome brochure in color on the subject of modern floor treatment. Many designs suitable for a large variety of uses. Suggestions for every type of building. Specifications. 40 pp. 8½ x 11. Bonded Floors Co., 1421 Chestnut St., Philadelphia, Pa.

Published by the same firm. Hospital Floors, a booklet dealing with this important subject. Illustrated in color. Distinctive Floors, folder illustrated in color with 12 plates showing different patterns of Gold-Seal Rubber Tile. Standard Specifications for Installing Battleship Linoleum over Concrete. A. I. A. File 28 covers standard practice for this material.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912,

Of Pencil Points, published monthly at Stamford, Conn., for October 1, 1924.

State of New York,
County of New York, } ss.,

Before me, a Notary Public, in and for the State and county aforesaid, personally appeared W. V. Montgomery, who having been duly sworn according to law, deposes and says that he is the Business Manager of the corporation publishing Pencil Points, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 443, Postal Laws and Regulations, printed on the reverse of this form to wit:

1. That the names and addresses of the publisher, editor, managing editor and business managers are:

Name of *Post office address*

Publisher, The Pencil Points Press, Inc., 19 East 24th St., N. Y. City.

Editor, Eugene Clute, 19 East 24th St., N. Y. C.

Managing Editor, None.

Business Manager, W. V. Montgomery, 19 East 24th St., N. Y. City.

2. That the owners are (Give names and addresses of individual owners, or, if a corporation, give its name and the names and addresses of stockholders owning or holding 1 per cent. or more of the total amount of stock.)

The Pencil Points Press, Inc., 19 East 24th St., N. Y. City.

Ralph Reinhold, 19 East 24th St., N. Y. City.

F. W. Robinson, 19 East 24th St., N. Y. City.

E. G. Nellis, 19 East 24th St., N. Y. City.

Marion S. Carpenter, 920 Fifth Avenue, N. Y. City.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent. or more of total amount of bonds, mortgages, or other securities are: (If there are none, so state.) None.

4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company, but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

5. That the average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the six months preceding the date shown above is................ (This information is required from daily publications only.)

W. V. Montgomery,
Business Manager.

Sworn to and subscribed before me this third day of September, 1924.

[Seal.]

G. H. Sykes,
Notary Public.
My commission expires March 30, 1926.

PENCIL POINTS

VOLUME V DECEMBER 1924 NUMBER 12

THE VITAL SPARK

OF GREAT significance to architects, draftsmen and students everywhere are the activities being started by the Brooklyn Chapter of the American Institute of Architects, as outlined in the advance announcement printed on another page of this issue. This movement is of much more than local or passing interest, for it contains the vital spark that springs from the bringing together of the younger element of the profession and the leaders. It means the establishment of a close relation that must make for the higher development of the abilities of the younger men, the opening of wide opportunities for them and, as a natural and certain result, the up-building of the architectural profession in general. It is this contact that gives life to an architectural club or to any other organization of draftsmen, a point that it is well to keep always in mind.

Among the features of the plan outlined by the Brooklyn Chapter of the A. I. A. are the following: affiliation of the younger men with the Chapter, with its inspirational and social value; the title of Student Associate; advisory assistance in professional and educational problems, a competition, possibly a great atelier and other advantages.

This opens up a matter that should have the immediate and earenest attention of every man interested in any architectural club or organization of draftsmen. Has your club the right kind of co-operation from able architects? If not, better get it, promptly. It is not difficult. The men you want, the brilliant, able architects are just the ones to respond readily and to take hold with a will. It is all well enough to have architects on the Board of Trustees or Board of Directors, but it is very much more important to have them working with the club right in with the other members and taking an active interest in the men and the activities of the club. Try it, tell some of the best architects in your city what you want to do with your club and ask them to take hold.

This is a matter for the attention of every architect who is a member of any organization of architects. The profession needs the most able and highly developed men in all positions and nothing will produce them so rapidly or well as this kind of contact between architects and draftsmen. The Brooklyn Chapter is making a move in the right direction, decidedly.

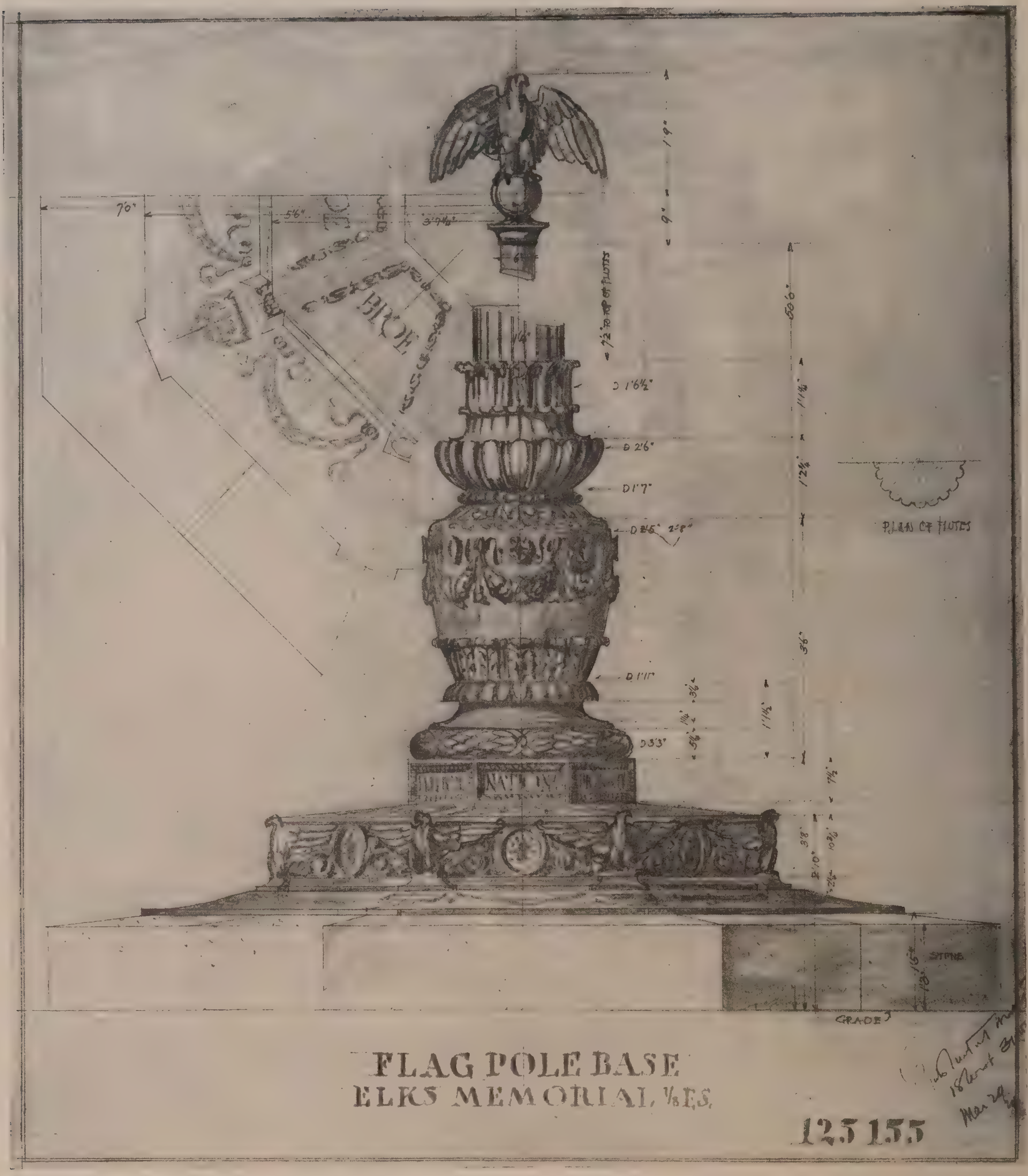
In any club or other organization of architects and draftsmen where the architects take an active interest of the best kind in the work of the organization, it will be found that they know the capabilities of the men and are interested in their development as individuals, showing them how to get the greatest benefit from their efforts, how to study architecture and how to make the most of their natural tendencies. Where there is co-operation of this kind, between the architects and the other members of the club, you are sure to find progress.

You will find really interesting programs; not the kind that sound as though they must be highly edifying, but fail to interest. You will find the spirit of earnest endeavor and a sense of good fellowship.

Where you find a body of architects working out such a plan as that being carried out for the benefit of the younger men by the Brooklyn Chapter of the A. I. A., you will find a live organization and one that will be strengthened as the years roll on, by that same younger element.

THE SKETCH COMPETITION JUDGMENT

Owing to the difficulty of assembling the jury for the Judgment of the entries in THE PENCIL POINTS SKETCH COMPETITION, *the award of prizes has not yet been made, but will be announced in the issue of* PENCIL POINTS *for January, accompanied by photographic reproductions of prize-winning designs. An exhibition of sketches will be held shortly after the judgment.*—EDITOR.



Flag Pole Base, Elks National Memorial Headquarters Building, Chicago, Ill.
Edgerton Swartwout, Architect.

WORKING DRAWINGS, FULL SIZE DETAILS

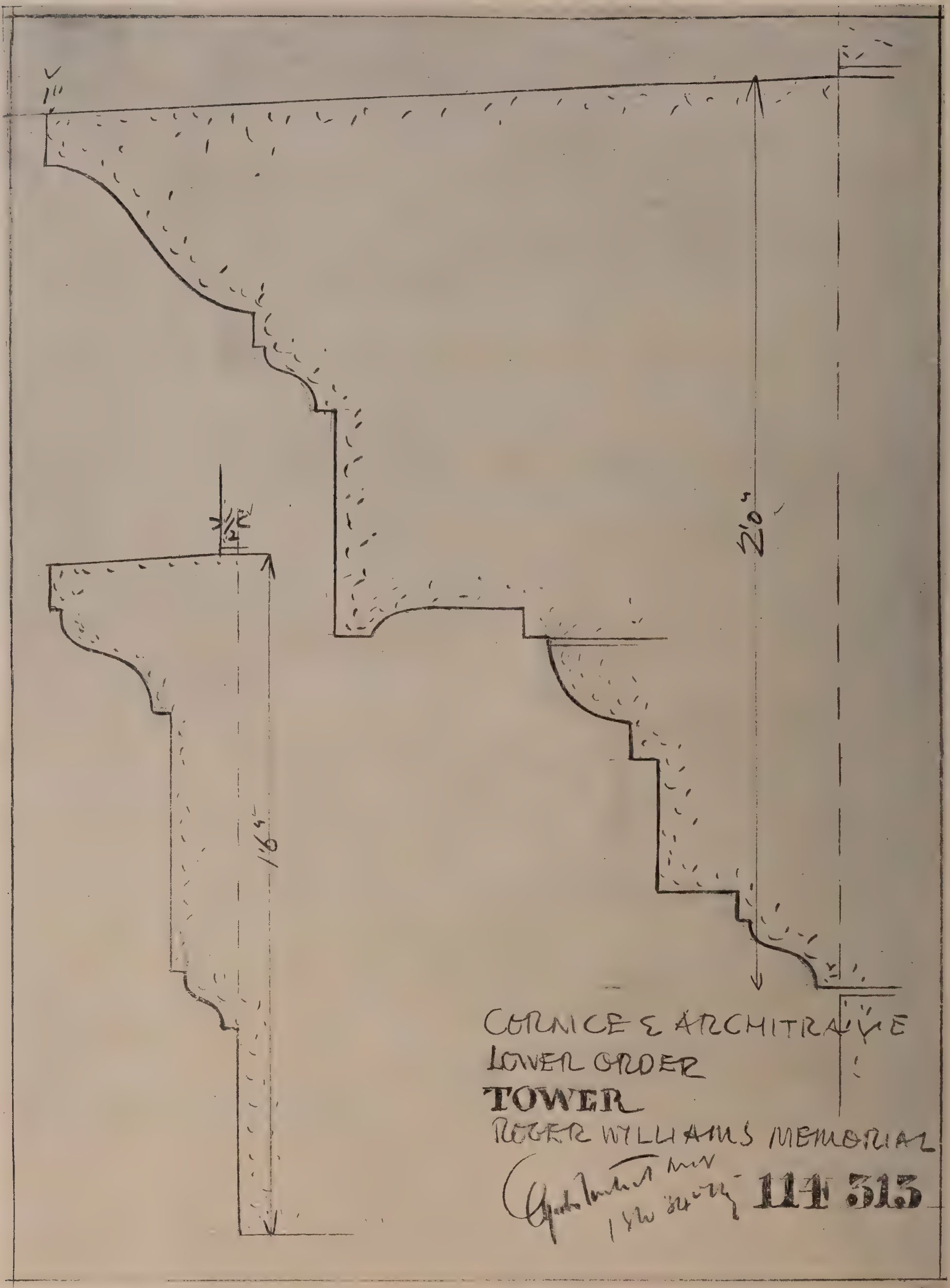
BY EGERTON SWARTWOUT

IN the old days we made full size details on detail paper; quite the natural thing to do, so it seemed to us, because, if the paper man had gone to the trouble to call a big roll of brown paper, detail paper, then the least we could do was to use it for details: we made them in pencil very carefully, and we tinted the sections with water color that came in little glass pots and was of a peculiarly loathsome shade of Prussian blue and a pinkish red something like diluted red ink, both colors having the unpleasant quality of sinking entirely through the paper and rendering erasures impossible. And we drew out all the ornament in line, taking it straight from Canina or Buhlmann or Letarouilly or Meyer's Handbook; each leaf was meticulously but childishly complete, and each little tendril was bounded by two hard lines like railroad tracks just exactly one-eighth of an inch apart. The sections through the ornament caused us a great deal of trouble; we really had no idea what they were or should be, but we showed them very carefully and with great profusion. We might, for example, have a ceiling to do, or a large panel in a ceiling, say six feet by twelve; we hunted through the books till we found a motive that just fitted the space, and although it might, and very often did, happen that the original was only eighteen inches by thirty six, still we copied it straight and carefully gave each leaf a section tinted in the aforesaid Prussian blue showing a projection of at least three inches and a half. All this naturally took a good deal of time and the drawings were very large, but what was time to us? And after we had made the drawing we were through; it was traced on paper by some slave who carefully omitted all the important parts, and the original was sent out to the contractor who made several other incomplete tracings of it, and it finally ended up in the modeller's shop where it was carefully rolled up and put on a shelf and only brought out when visits of inspection were made. The modeller got the size from the building and then he in turn looked up a book and did something quite different and generally much better.

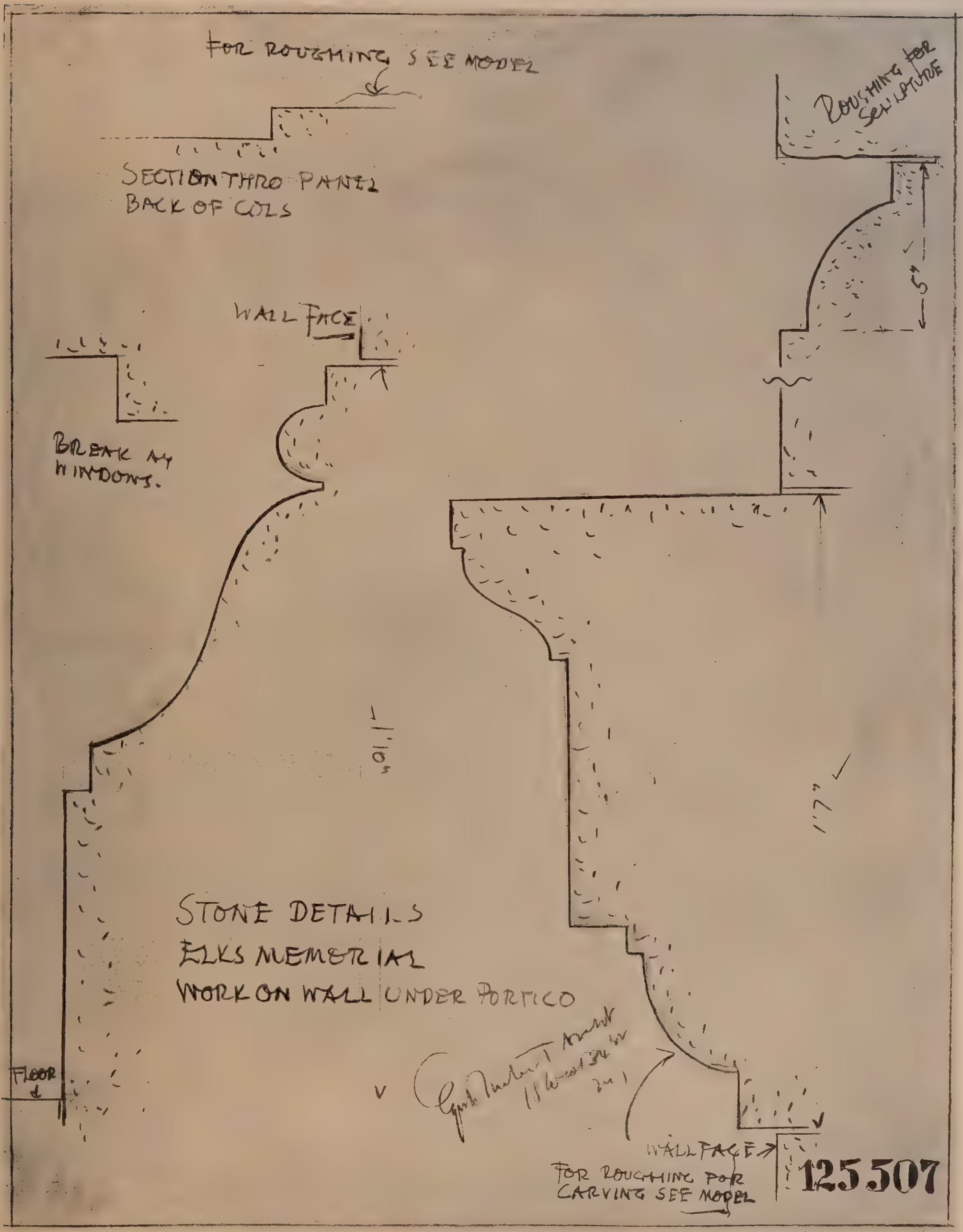
It's all changed now. The contractor wants dozens of copies of each detail, so the only thing to do is to have blueprints made for him, and generally there is no original, the drawing being made directly on the tracing. For sometime past we have made most all our details in charcoal on pencil tracing cloth. This cloth takes charcoal very well, in fact it is a delightful surface to draw on, and when the charcoal is fixed it stays forever and makes wonderful prints, much better than pencil. Naturally if there are a number of prints to be made we try to make the drawings as small as we can; if we are detailing a large entablature for example, we give merely the outlines not bothering to put the architrave in its natural position, but wherever we can get it in on the sheet, fixing its relation by figures to the face of the pilaster or center of the column below; and only in a very few cases do we ever draw ornament full size, and the reason for that is that for the last twenty years or so we have worked with one modeller. He knows how to interpret our scale drawings, and from them he makes his preliminary model in clay and this model is studied and changed until we all agree it is about right. It is then cast and carved in the plaster. An order is generally modeled complete, column, cap, base and entablature at ¾" scale if large or 1½" if small. For a large Corinthian order we generally go from the ¾" scale model up to ¼ full size model making a cap about a foot or two high. This model is carefully finished and is for the use of the carver in roughing and pointing. We do this because we have found it practically impossible to make a correct cast of a big model. If the cap full size is 6' 0" high or over it will warp and twist in spite of all efforts to keep it straight; the axis will become bent, and the leaves askew, and the carvers have the devil's own time trying to point from it; no two measurements will agree. Whereas in the ¼ full size the cap has a steel wire axis and is practically correct, and the carver merely sets his pointer to four times. Of course we make a fragmentary full size model; each different leaf, the volutes and all that is necessary, and they carve from that.

The ornament, as I have said, is modelled from scale drawings; in case of simple running ornament from ¾", in other cases ¼ or ⅛ full size. For example, take the bronze candelabrum of the Elks Memorial; the drawing is ⅛ full size and is a sketch in charcoal. It would be extremely difficult and tedious to draw this full size and such a drawing would not only be unnecessary but misleading. You will note on our drawing we give all measurements, and from these measurements the modeller works. He can get the scheme and the character much better from the scale drawing which he can see in its entirety, than from a full size drawing too big to handle; and, it is my experience, he much prefers to work from the scale drawing. But the measurements are most important; figures should always be given and given very completely. Someone has to establish these figures, and the man who makes the drawing is much better qualified to establish them than the modeller. Then, too, the prints never scale accurately, no two prints of the same tracing will scale the same, and for this reason it is our custom to figure all dimensions on the full size, even repeats of ornament and the location of ornament.

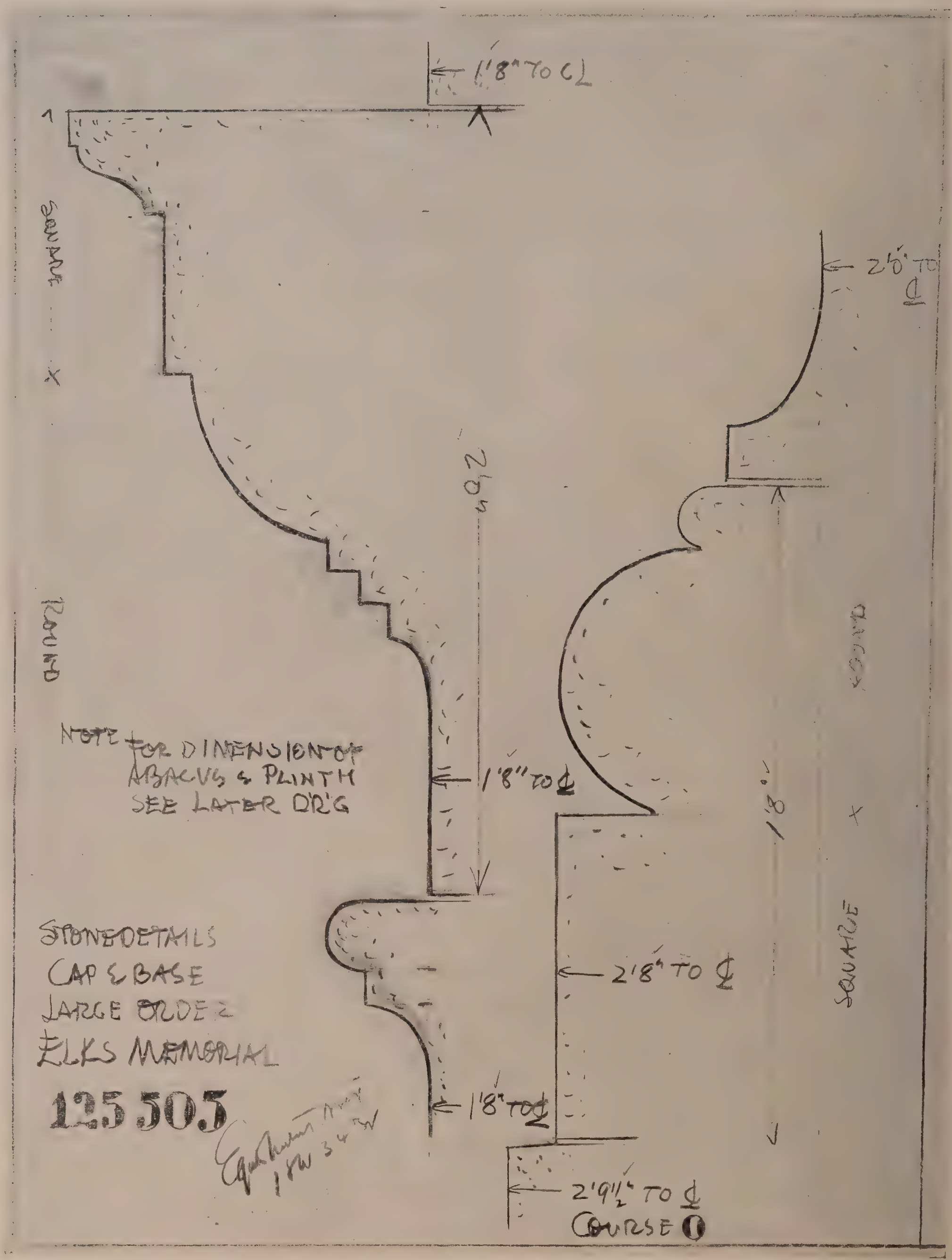
Now, if there is one thing more than another which is a bugbear to the draftsman it is the matter of entasis. In the old days we laid it out full size and it took two tables and sometimes three, to hold a piece of paper long enough. Generally



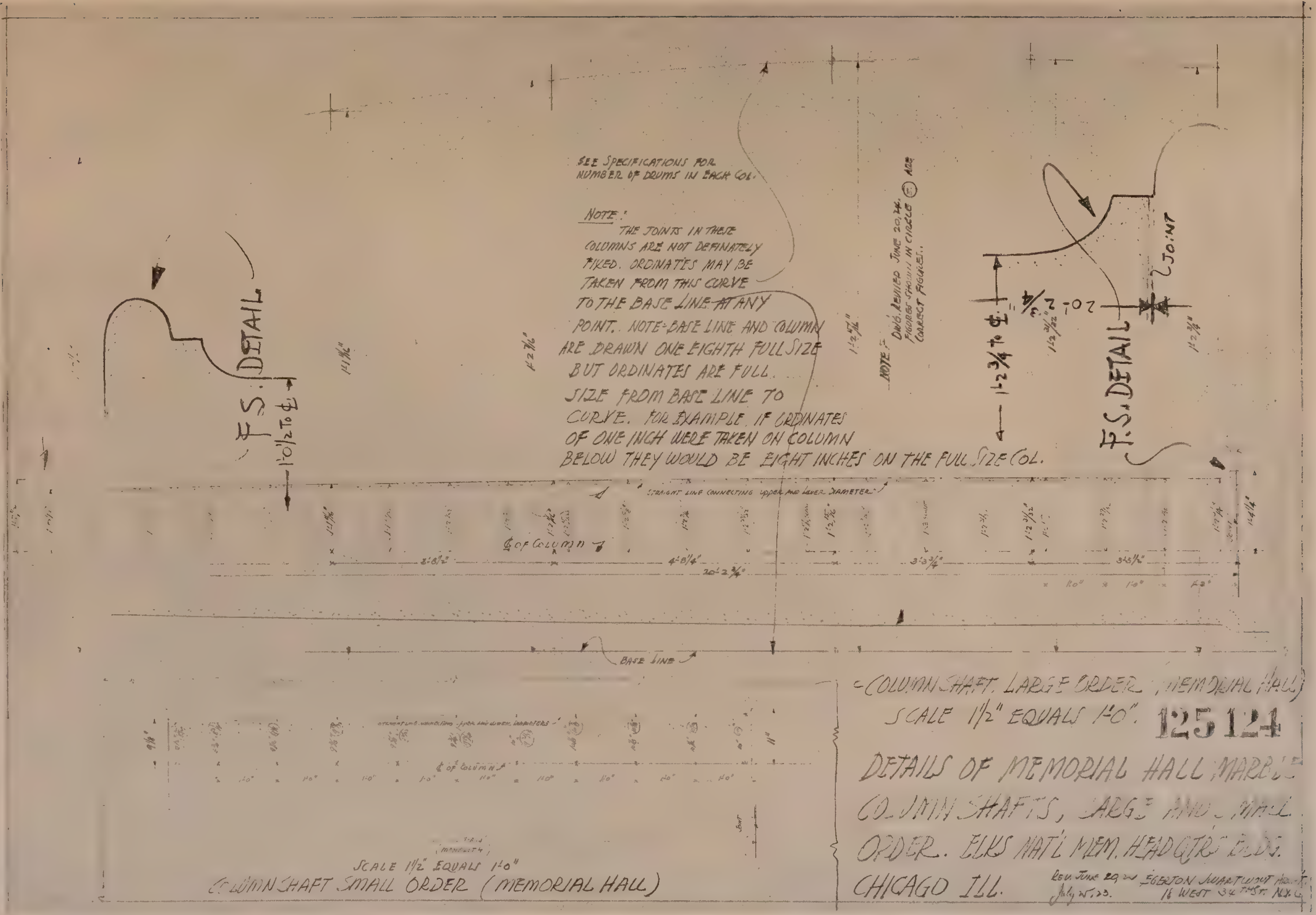
Cornice and Architrave, Lower Order, Tower of Roger Williams Memorial, Washington, D. C. Egerton Swartwout, Architect.



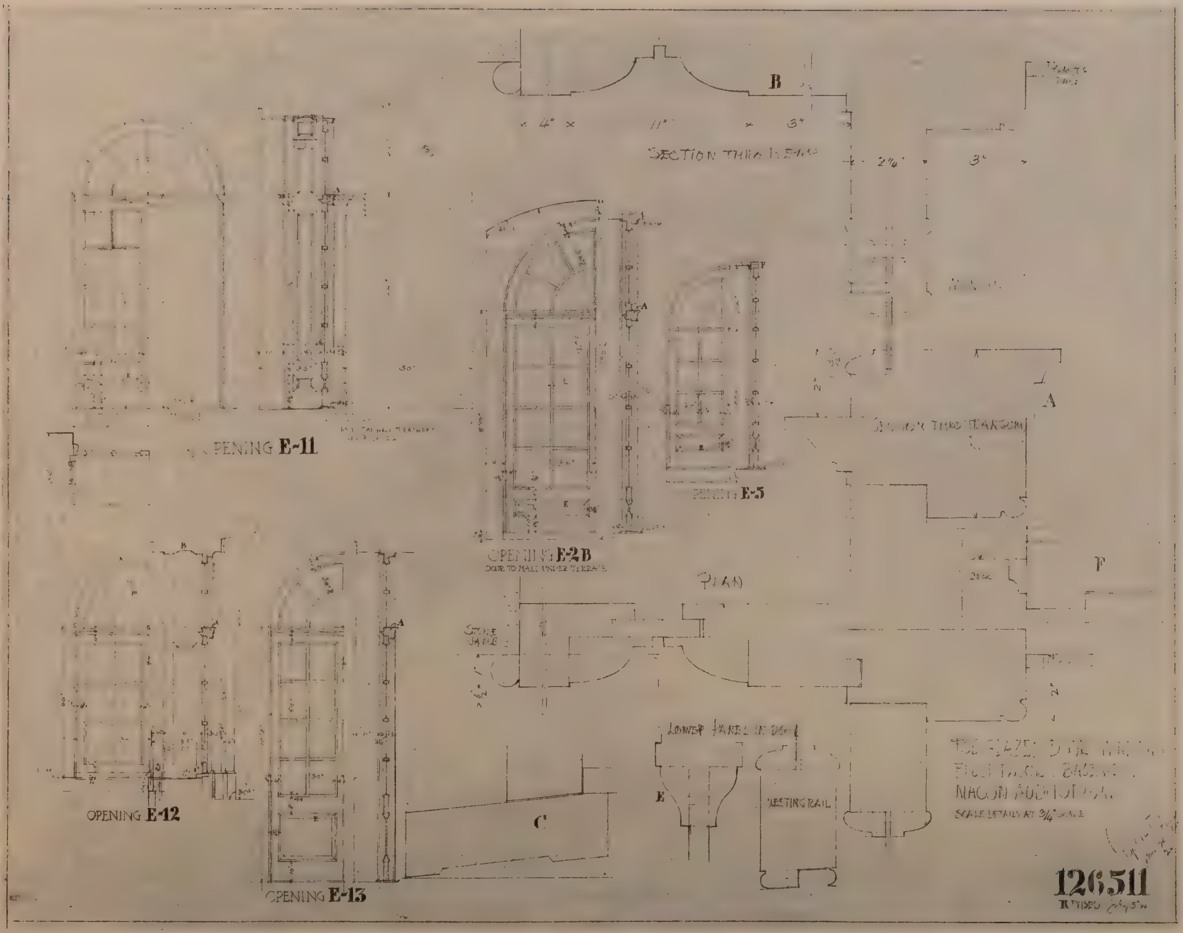
Stone Details, Elks National Memorial Headquarters Building, Chicago, Ill.
Egerton Swartwout, Architect.



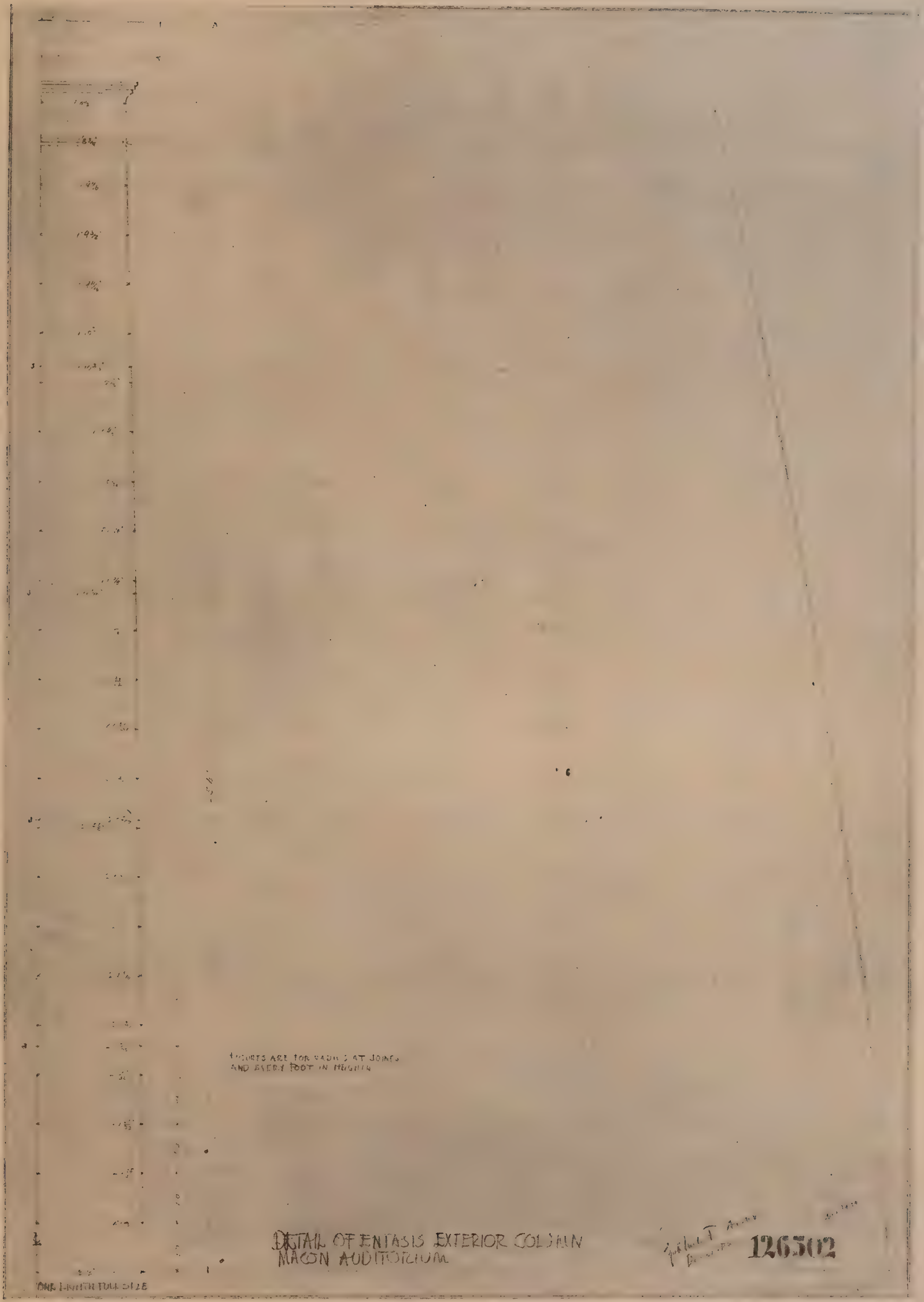
Stone Details, Elks National Memorial Headquarters Building, Chicago, Ill.
Egerton Swartwout, Architect.


SEE SPECIFICATIONS FOR NUMBER OF DRUMS IN EACH COL.
NOTE: THE JOINTS IN THESE COLUMNS ARE NOT DEFINATELY FIXED. ORDINATES MAY BE TAKEN FROM THIS CURVE TO THE BASE LINE AT ANY POINT. NOTE: BASE LINE AND COLUMN ARE DRAWN ONE EIGHTH FULL SIZE BUT ORDINATES ARE FULL SIZE FROM BASE LINE TO CURVE. FOR EXAMPLE, IF ORDINATES OF ONE INCH WERE TAKEN ON COLUMN BELOW THEY WOULD BE EIGHT INCHES ON THE FULL SIZE COL.
NOTE: DWG. REVISED JUNE 20, '24. FIGURES SHOWN IN CIRCLE ARE CORRECT FIGURES.
F.S. DETAIL
1'-0½" TO ℄
F.S. DETAIL
1'-2¾" TO ℄
JOINT
STRAIGHT LINE CONNECTING UPPER AND LOWER DIAMETER
℄ OF COLUMN
8'-8½"
4'-8¼"
20'-2¾"
3'-3¾"
BASE LINE
COLUMN SHAFT, LARGE ORDER (MEMORIAL HALL)
SCALE 1½" EQUALS 1'-0".
125124
DETAILS OF MEMORIAL HALL MARBLE COLUMN SHAFTS, LARGE AND SMALL ORDER. ELKS NAT'L MEM. HEADQTRS BLDG. CHICAGO ILL.
REV. JUNE 20, '24
July 25, '23.
EGERTON SWARTWOUT ARCH'T. 16 WEST 34TH ST. N.Y.C.
SCALE 1½" EQUALS 1'-0"
COLUMN SHAFT SMALL ORDER (MEMORIAL HALL)

Details of Memorial Hall Marble Column Shafts, Large and Small Order. Elks National Memorial Headquarters Building, Chicago, Ill.
Egerton Swartwout, Architect.



Glazed Door and Windows, First Floor and Basement, Macon Auditorium, Macon, Ga. Egerton Swartwout, Architect.



Detail of Entasis, Exterior Column, Macon Auditorium. Egerton Swartwout, Architect.

we made the column straight, or rather vertical, for one third the height, and then divided the remaining distance into a certain number of equal parts and then drew a quarter segment of a circle with a radius equal to half the lower diameter of the column and cut this segment with a line equal to one-half the top diameter, and divided the resulting segment into the same number of equal divisions as had been done for the upper portion of the shaft. This gave a series of ordinates which established the radii at the various points of division of the shaft, and by connecting these points with a curve we established the entasis. This is the method generally given in copies of Vignola and is really the vertical projection of a helix. It's not a good scheme. It's true the lower third of a column ordinarily approaches the vertical except, of course, a Greek Doric or similar order, because the entasis counteracts the diminution, but in a true entasis the line is never straight. Then, too, by this scheme the line tumbles in rapidly at the top, the column becomes cigar-shaped; and by laying it out full size it is so big that it is difficult and almost impossible to handle, and it is equally hard to judge the curve. Very few offices have a ceiling high enough to judge the entasis vertically, and if they had, the pencil line could not be seen; and if the line is thickened sufficiently so that it can be seen, it is difficult to scale accurately. Also, a big drawing such as this will stretch or shrink so that after a week or so it may be an inch or two longer than it should be, or that much shorter. For some time past we have drawn our entasis at a combination of scale and full size, that is to say, we first made a careful drawing of the shaft at ¾", or at such a scale as would make the actual drawing about two feet high, a size most convenient to handle, showing the entasis we wanted as accurately as we could at that scale. On this drawing we laid out ordinates every foot in heighth, or at each stone joint, or both, continuing these ordinates for some distance beyond the column face. We then scaled as accurately as we could each ordinate on the scale drawing and laid this dimension out full size on the extended ordinate. This gave us a series of points which when connected formed, or should form, a perfect curve exaggerating the curve of the entasis, the horizontal dimensions being full size and the vertical dimensions at ¾" or whatever scale was used. Now we invariably found that the original points when connected would not form a perfect curve, the reason being that on account of the divergence between the two scales, a very slight error, say of 1-16" horizontally, will produce a distinct hump or depression in the curve; a difference so slight as to be unnoticeable in the actual column will, when drawn in this exaggerated way, produce a break in the curve. We therefore corrected the curve so as to make a perfect line and then we readjusted the lateral dimensions to agree with the new curve. By this means we could obtain absolutely accurate ordinates full size at any point in the column, and the whole drawing was very small. For example, let us suppose the column was Corinthian 32' 0" high; at ¾" scale the shaft alone would be somewhat more than 20" high. Now it is not necessary to extend the ordinates to the full length of the radii; all you need is the difference between the top and bottom radii, in this case somewhat over 3". Therefore, if you drop a perpendicular from a point on the top ordinate, and on the bottom ordinate lay off 3" or whatever it is, and connect these points, you have the diminution of the shaft, and the points on the entasis beyond this line can be found by deducting the top radius from the scaled dimensions of each ordinate; so that the exact entasis for a column 32' 0" high can be laid out on a drawing about 4" wide by 21", or so, high. There is only one word of warning about the use of this scheme: it has to be very accurately drawn, particularly the vertical divisions. The curve of the entasis is naturally at an acute angle to the ordinates and a very slight error in vertical dimensions will cause quite a marked mistake in the length of the ordinate.

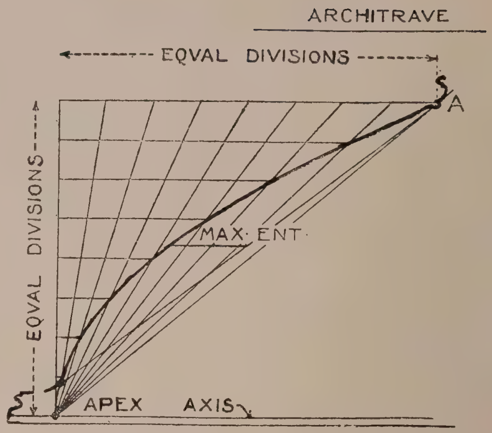
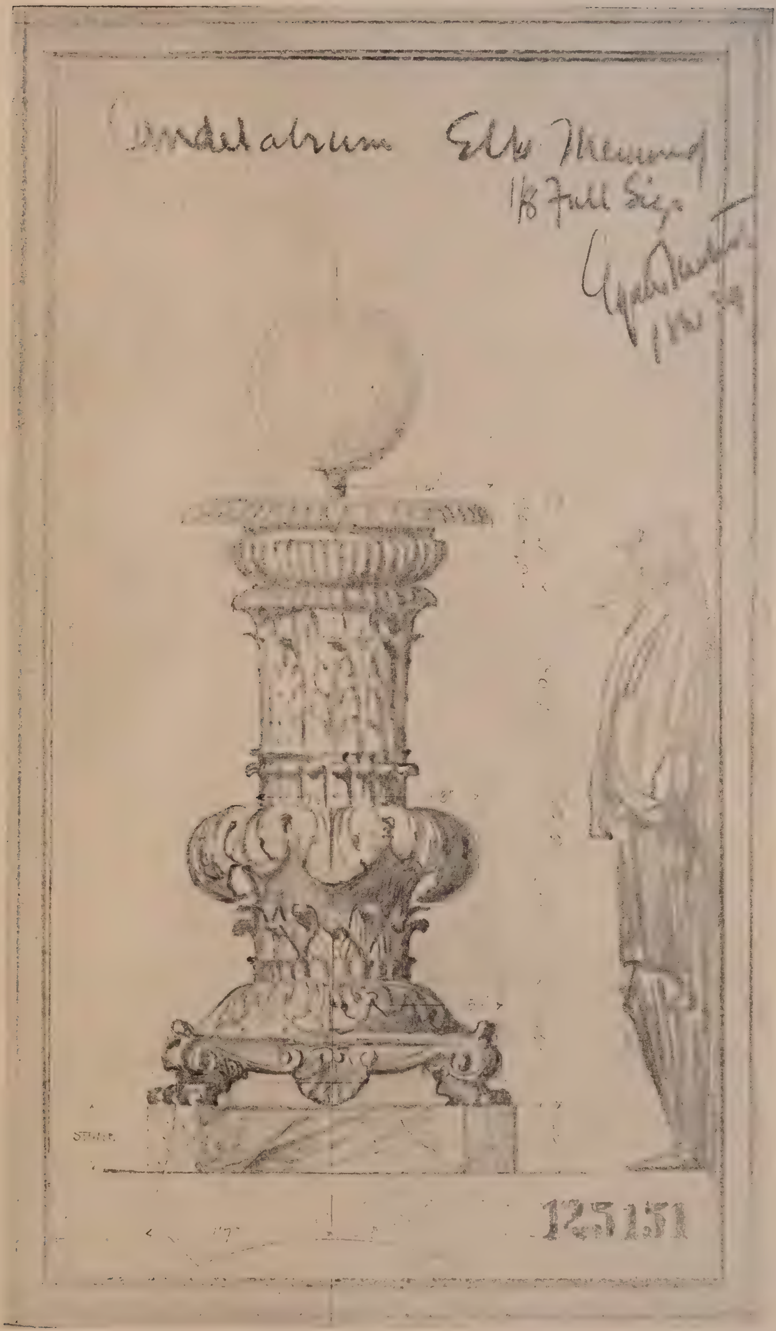


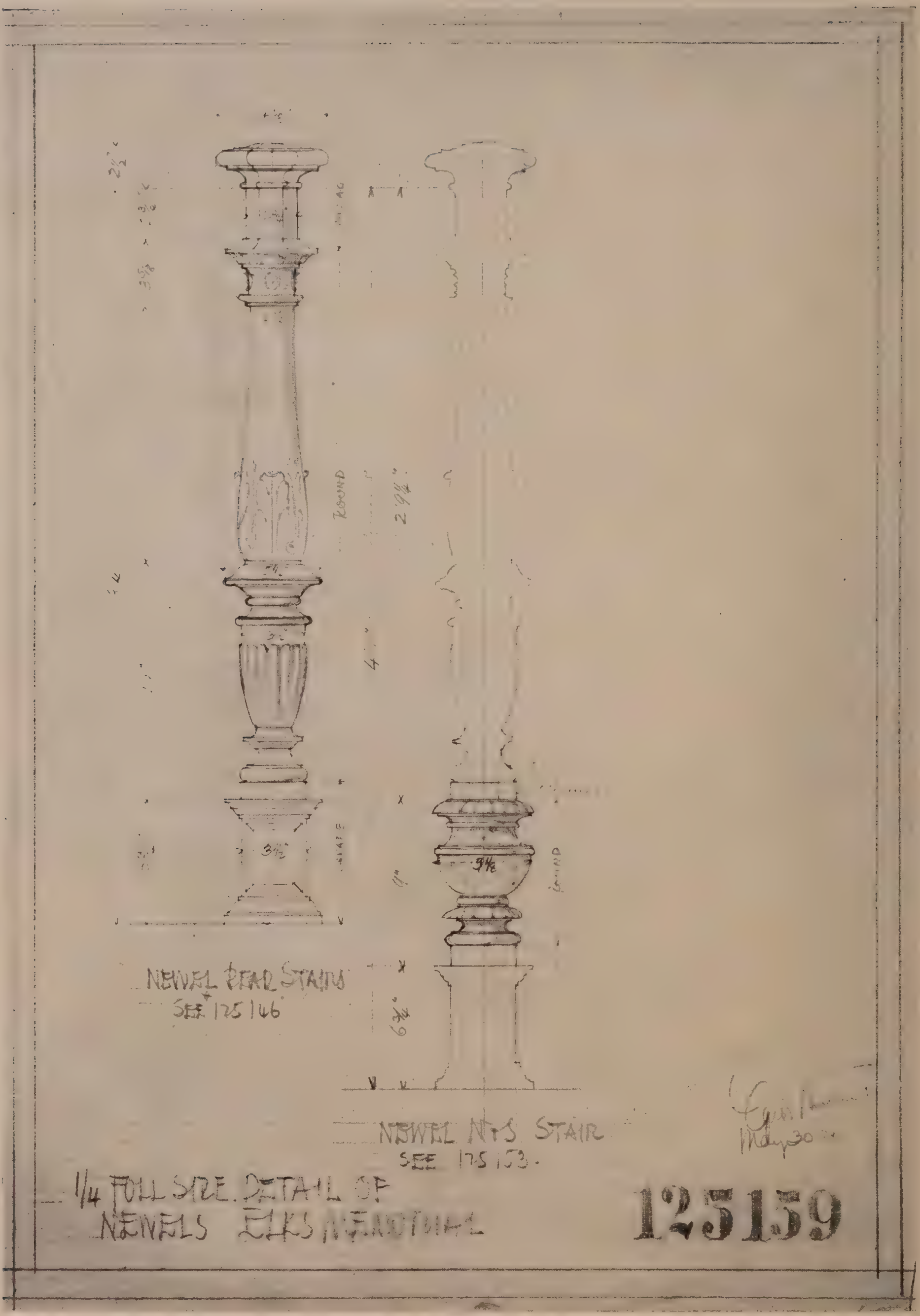
Diagram from "Roman Entasis"
by Gorham P. Stevens.

In this matter of entasis I have been much interested in a monograph written by Gorham P. Stevens of the American Academy in Rome, which Mr. Stevens sent me some four or five months ago. Mr. Stevens has measured the entases of many of the Roman classic orders and finds they are generally some conic section, hyperbolas, or parabolas or double parabolas or in some instances approaching chonchoids. Now parabolas and hyperbolas being conic can be drawn at different vertical and horizontal scales and yet retain their curve, and Mr. Stevens has accordingly adopted a scheme of laying out the column vertically at ⅜" scale, and the horizontal measurements at four times full size, the increase horizontally being made to minimize error. This scheme forms a much more exaggerated and

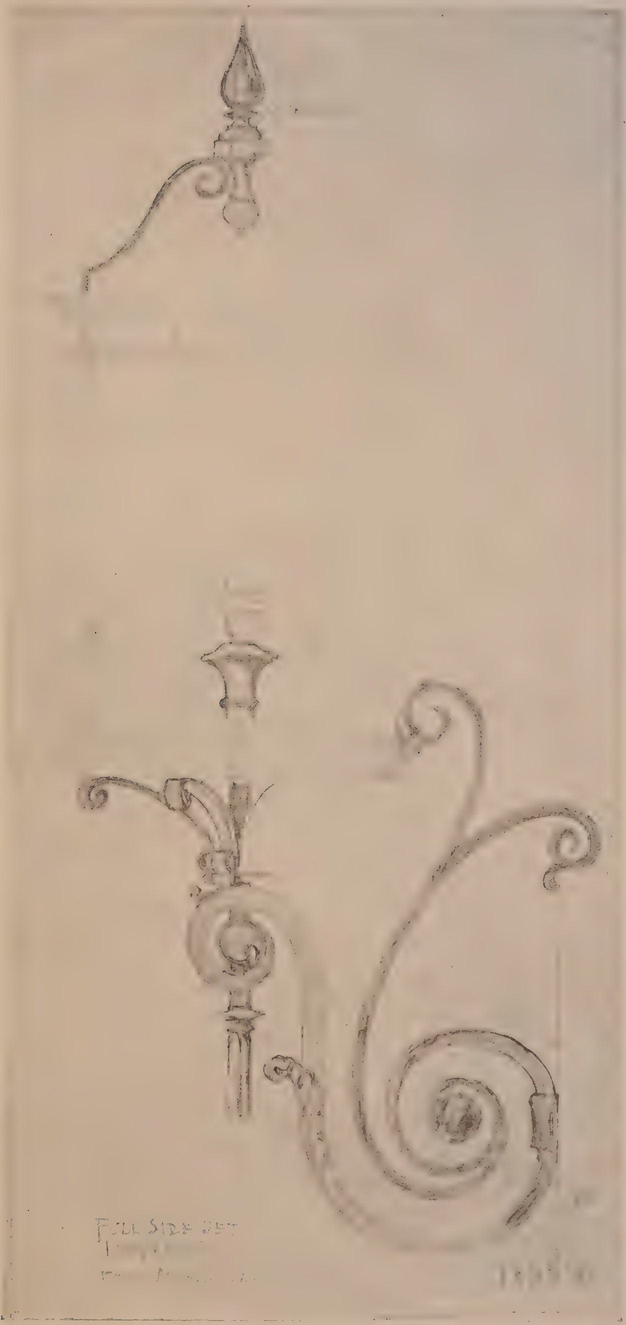
(*Continued on Page* 100)



One-Eighth Full Size Detail Candelabrum, Elks National Memorial Headquarters Building, Chicago, Ill. Egerton Swartwout, Architect.



One-Quarter Full Size Detail of Newels. Elks National Memorial Headquarters Building, Chicago, Ill. Egerton Swartwout, Architect.



Full Size Detail, Iron Lamp in Court. Elks National Memorial Headquarters Building, Chicago, Ill.
Egerton Swartwout, Architect.

Suggestions for Promoting a Better Appreciation of the Value of the Services Rendered by Members of the Architectural Profession

BY TORRANCE FISKE

Note—This is the article winning the $50 prize announced in our October issue for the best article dealing with the question of "Selling" Architecture, as set forth in our October editorial. Other interesting contributions have been received, a digest of which will appear in the January number.—Editor.

I WRITE frankly as a novice, having left a financial business less than two years ago for the study of architecture. If my ideas are not pleasing to some members of the profession they may be disregarded as coming from one who knows little of architecture. If they have value it is because ten years experience in business and long residence in a middle western city, where architects starve and contractors flourish, have given me a critical layman's point of view.

There seem to be two major difficulties: the lack of a developed artistic sense among the people, and the failure of the architects themselves to win the confidence of the people by their performance. It can hardly be expected that a developed sense of beauty should exist throughout the greater part of our country. It is too new. In the west the pioneers are still living. Never in history have the arts developed without leisure and wealth. Time will change this, is changing it, but much can be done by way of education. Many suggestions were made in the editorial of your October issue which can be more fully developed by the chapters conversant with local conditions.

But I wish to speak of the second difficulty—the failure of architects to meet competition—for in the correction of this trouble are quicker and surer rewards.

Why is it that the contractors get the business? Because they are better salesmen, better business men, and solve their problems in a more practical way. They operate on common sense and they work in three dimensions. They can discuss intelligently with a prospective builder the economies of plans, the relative merits of different types of construction, the rental situation, insurance, the business outlook and the political situation. They are short on theory and long on experience. True, they seldom have a developed artistic sense but the qualities they have bring them to an understanding with the intensely practical people with whom they are dealing.

In the west there is a widespread feeling that architects are "theoretical" and "artistic," which terms, defined, mean impractical and unbalanced. Certainly the men of that profession do not command the confidence they should. Until this is remedied there will be little improvement in the architect's bank account or the city's beauty.

Sometimes a first impression is worth more than much later consideration. At any rate on my first arrival at the school of architecture the emphasis laid on rendering struck me as all out of proportion to the other values of the problem. After all, I thought, it is the building itself that is really going to count, and an architect said to me the other day, "The really big architects of the country are great because they *build* fine buildings, not because they *draw* them."

When I had bonds to sell the most efficient method I ever found to prepare a sales argument was to sell the security to myself. I can't help but wonder if the same system wouldn't work for an architectural problem.

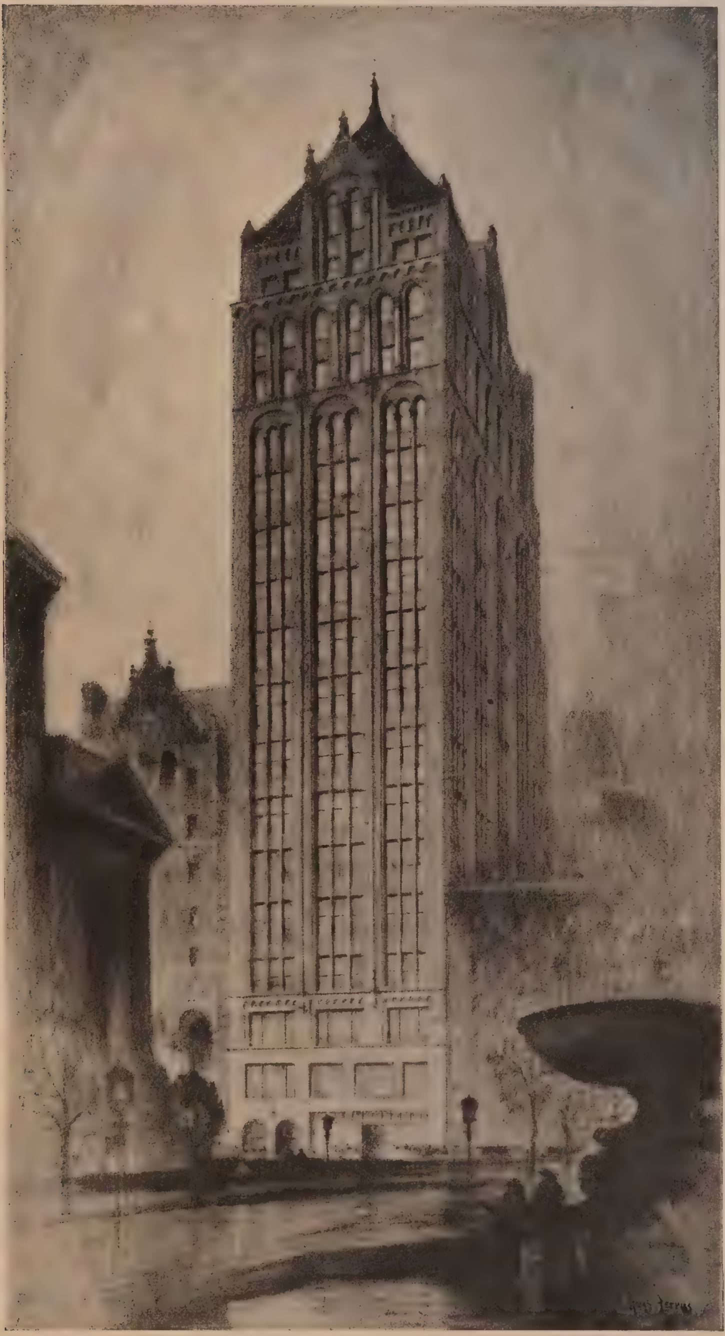
The essence of architecture is beauty, and no true architect will argue otherwise. Yet in this age he must conform to the conditions imposed, which are invariably a most practical clientele and the hardest kind of competition, from alert, shrewd and competent, if not artistic, builders. This clientele is quick to appreciate a good building. Last summer the manager of the Montgomery Ward Co. plant in St. Paul showed me their new building with evident pride. "We are doing more business, and doing it cheaper," he said, "because of the splendid layout we have."

To gain the needed confidence of the public it is my belief that the architectural profession must make a fair-minded and searching study of its own faults, of the competition it faces, of the clientele it must reach, and trim its sails accordingly.

CHRISTMAS GREETING

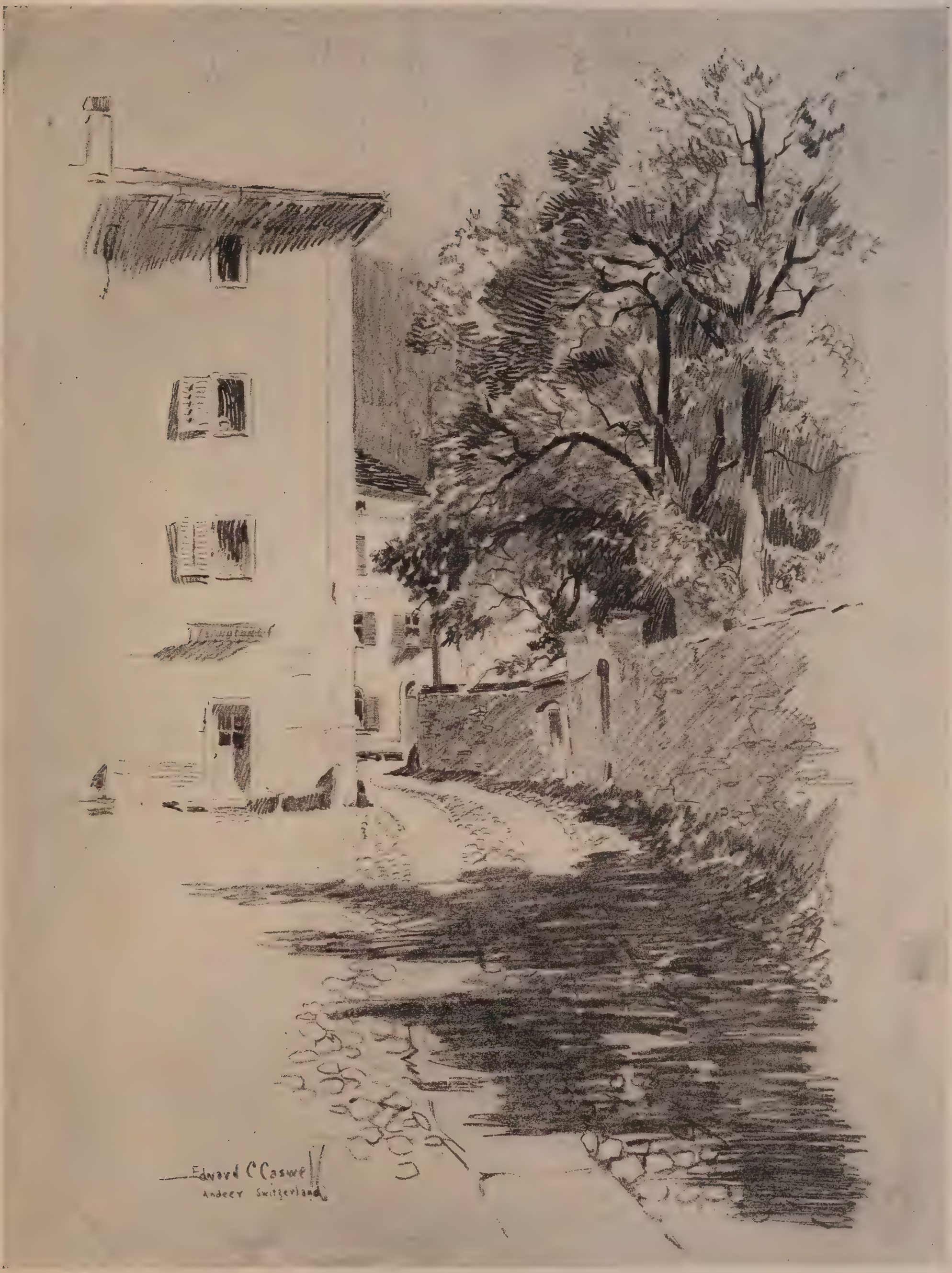
AN UNUSUALLY close relation of friendliness and co-operation has always existed between the readers and the publishers of Pencil Points *—a relation that has grown out of the hearty response to our announced purpose to publish* Pencil Points *with rather than for our readers.*

It is with a deep appreciation of this relation that we wish you
A MERRY CHRISTMAS



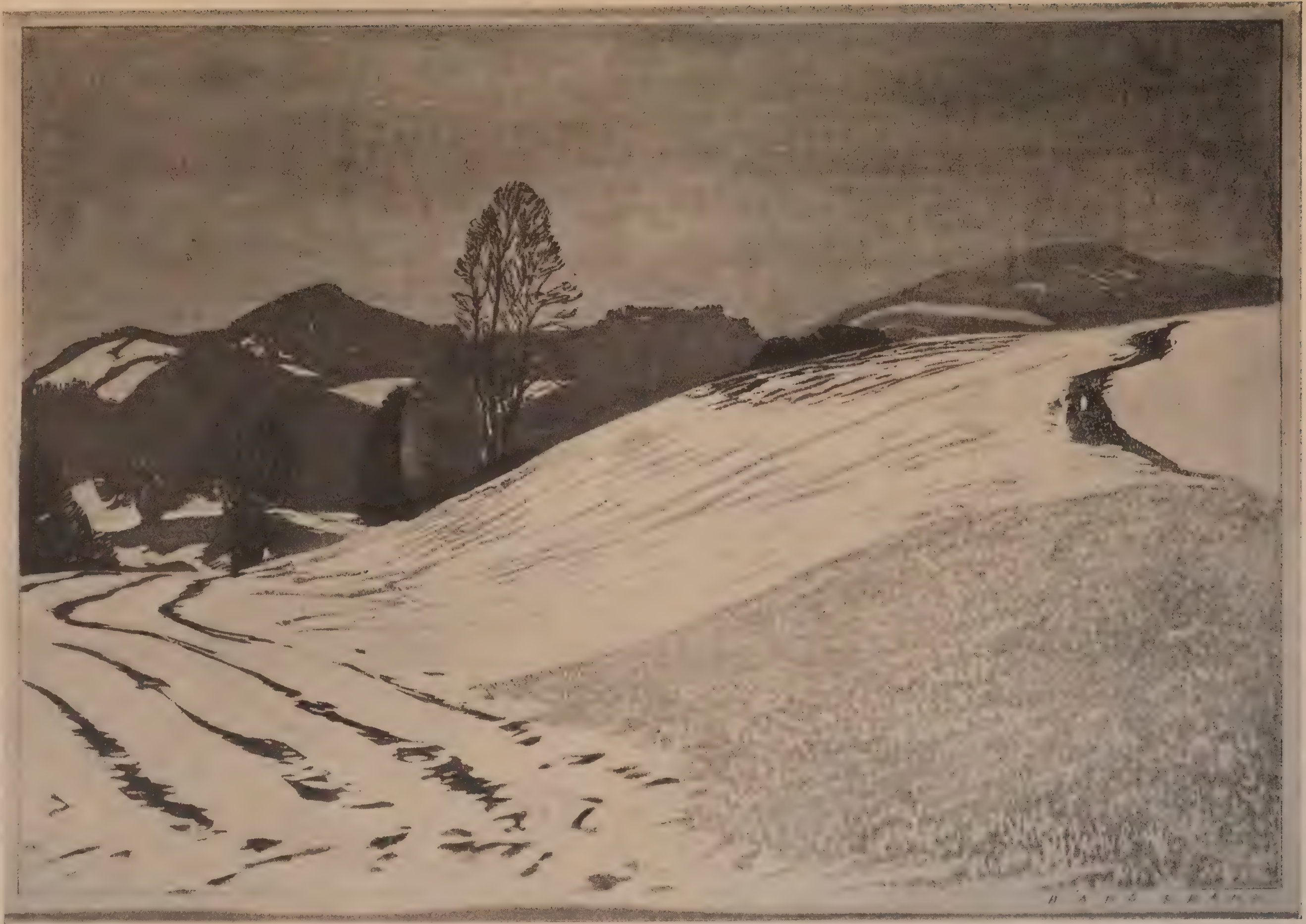
RENDERING BY HUGH FERRISS
NUMBER TWENTY-FOUR WEST FORTIETH STREET, NEW YORK CITY
ELY JACQUES KAHN, ARCHITECT.

On the other side of this sheet is reproduced a rendering by Hugh Ferriss, presenting the building for Twenty-four West Fortieth Street of which Ely Jacques Kahn is the architect. This is interesting from the standpoint of technique because it conveys the definite idea of the building required by architect's clients usually, and at the same time it is free from the hardness of treatment found so often in presentation drawings.



PENCIL DRAWING BY EDWARD C. CASWELL

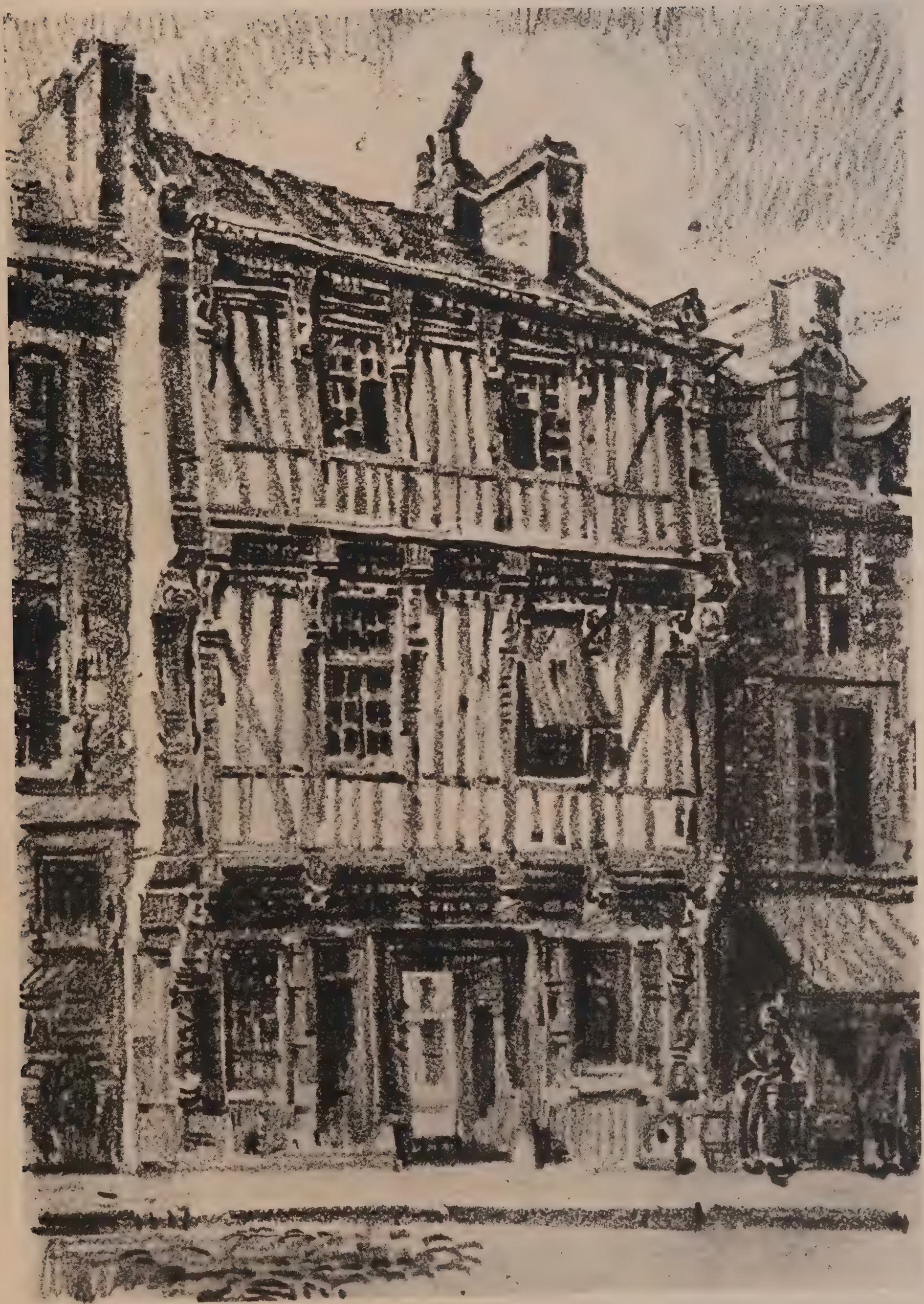
On the other side of this sheet is reproduced one of the many admirable pencil sketches made by Edward C. Caswell during his travels in Europe last summer. While most of his sketches were made in Spain, this one shows a Swiss scene and the style of treatment is different from that of the Spanish sketches, in harmony with the character of the subject.



Courtesy of Emil Hansel.

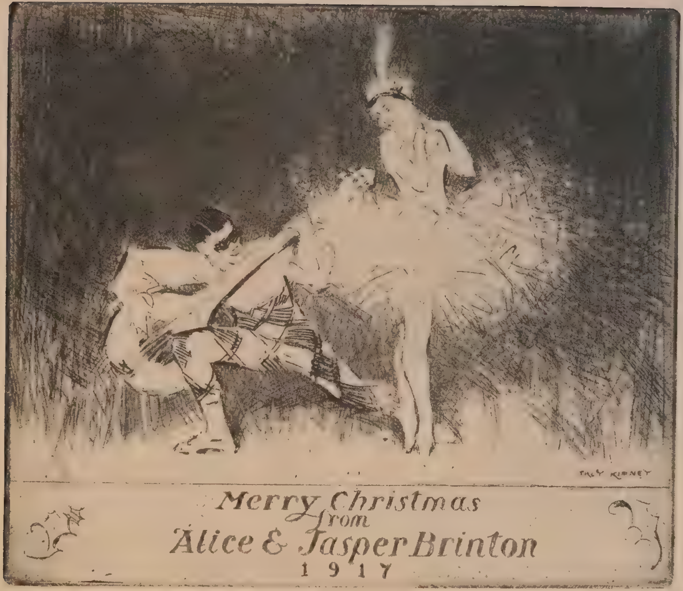
WOOD BLOCK PRINT IN COLOR BY HANS FRANK

The wood block print reproduced on the other side of this sheet is notable for its excellence of composition in line, mass and tone. The coloring which is necessarily lost in our reproduction is also well handled, hills of deep blue against a sky of lighter blue and in the foreground an area of olive tawney colored grass from which the snow has been blown away.



LITHOGRAPHIC SKETCH BY GEORGE D. CONNER, BAYEUX.

A drawing in lithographic pencil by George D. Conner that is characteristic of his manner in its strength and breadth of treatment is reproduced on the other side of this sheet. The subject is one of the most interesting old houses in Europe.



THE ETCHING OF GREETING CARDS

BY TROY KINNEY

GREETING cards are the busy person's means of letting his friends know they are not forgotten, though seen only semi-centennially. Etched by the sender, the greeting card has the desirable "personal flavor." It is also a Frankenstein.

Start the practice of sending out your own etched greetings and you keep it up for life. Skip a round, and your friends openly scold or act aloof and hurt. Moreover a fellow puts off starting his New Year's plate till the evening of December 23rd; the plate promptly gets itself into the almost-but-never-quite-finished state, and obstinately sticks right there for two weeks. But in time you get used to being behind time, so in the long run the greeting card idea is probably good.

The editor commands me to tell you how these little plates can be made easily. If there is any way to put anything on copper easily, yet decently, I want to know it. One solution was found by Van Magonigle. After I'd thoroughly educated him in the technique of copper he started an annual series of New Year cards which he cuts delightfully on linoleum. What is the corollary? I don't know.

Certain it is that etching requires more equipment than is justified by any other than professional work. If one must etch greetings, therefore, my suggestion would be not to etch them at all, but dry-point them. Using the word in its exact sense, etching gives you complete freedom of line, whereas dry-point does not until you have become well acquainted with your tools. Etching ground, though tough, does not perceptibly resist the movement of the needle, and the point of the needle is dulled enough not to scratch the copper. So you can scribble and sweep and accent as freely as though you were drawing lines in the air; and the strength of this or that line is not dependent on pressure, but is determined by the length of time it is subjected to the action of the acid. But the laying of a ground is not easy for most etchers. After the plate is chemically clean, there is dust to think of. If there is a speck of dust in the room while your ground is still melted on the plate, that speck settles on your plate, where the nose of the figure is going to be. And the acid promptly gets through the embedded dust speck, making a large, deep, false bite. That's why I suggest dry-pointing unless people are skillful at laying grounds, or so situated that they can clean out all the dust in the room, and hang up wet sheets to catch what's left after that. Moreover, etching requires a supply of acids, trays and other requisites that take up more room than can be spared in these bins locally known as "studios" and "apartments."

Dry-point, on the other hand, is simple. To get lines into copper is no trick at all. The job is to get them out. To get them in, use any kind of a point—a pocket knife will do it. The knife type of point throws up a strong bur, which prints very black. You can reduce or eliminate the bur in ways that I'll go into after I've explained a little more about points.

Note—The etchings for greeting cards by Troy Kinney shown in connection with this article are reproduced at the exact size of the originals.—EDITOR.

While the knife point is mentioned to instance the ease with which lines can be cut, it may be added that a point of that sort is of great practical use for emphasizing blacks where you want them, just before you finish up. But the points you will use most, because of their comparative freedom of stroke, are conical pointed. The wider the angle, the greater the freedom. A very acute point, applied with any considerable pressure, digs into the metal and resists, or bucks, when you change direction of stroke. Forty-five degrees or so, gives a good printing line. Much more obtuse than that runs the risk of a line that will print "watery" or "rotten." Both freedom of movement and good printing quality are helped by applying the needle perpendicular to the plate. Except where you want burs, it is developed by working diagonally to the plate.

Diamond points cost money and—so far as I can see—are no better than steel in any respect except that they require sharpening. Steel has the advantage that you can shape the point to suit yourself. Lines will soon begin to tell you what treatment they want, and an interesting part of the game is to shape your three or four points accordingly. Every dry-pointer develops his own tools for free lines, deep lines, broad or delicate lines, and so on. The occasional need of lines without bur has produced various forms of pyramidal points—developed by long experimenting. Strang put such a point on the market; but most dry-pointers keep them locked in a burglar-proof vault. But method really doesn't matter. Rembrandt's proofs show frequent marks of the graver, as is common knowledge; even to marks of sandpaper pressed on in spots to give body to a tint. You can find where various artists have used all kinds of points to make lines and dots. The difficulty is not to get them in, but to modify them and get them out.

Bur is reduced by a scraper or a burnisher. The scraper is in effect a miniature three-edged dagger. The burnisher is a rounded bar of polished steel. Be careful to keep loose minute flakes of copper from getting under your burnisher; they scratch the plate. A little drop of oil on the burnisher tends to keep it from digging or roughing the copper.

Mistakes can be avoided by attempting nothing or by being omniscient. Otherwise you will have lines to take out and wholly or partly execute over again. The means of taking out all but deep lines are (a) the water-of-Ayre stone, or snake stone, and (b) charcoal prepared for the purpose to reduce the scratches left by the stone. The original polish is restored by metal polish applied with a polishing felt. I use Solarine metal polish because it does not etch or scratch.

The stone and charcoal are applied with plenty of water. It is convenient to do this work near a hydrant, so as to rinse off the muck frequently and assure yourself that you're not taking off too much. If a line is too deep, this is the way to reduce it. If you want to save certain points that establish the drawing, deepen them from time to time as the undesirable lines wear away.

Now, this wearing down leaves a depression. If the depression is too abrupt, it is going to retain ink when the plate is wiped. When the dirty little spot is cleared of ink, it is practically impossible not to clean it too much, so that it prints whiter than the prevailing tone of the proof. The thing to do, therefore, if you must take out a detail surrounded by work that you want to save, is to beat the offending detail out into relief, and eliminate it by scraping down to flush. To "beat out" take a pair of calipers, close them down with one point close over the line to be removed, the other point almost touching the back of the plate. You now doubtless anticipate. With the visible point follow the line, bearing upward strongly enough to make the lower point scratch into the back of the plate. That scratch is your guide for "beating out."

The tools are a punch, hammer and anvil. An anvil is anything solid, flat and smooth; a flatiron will do. Put two layers of blotting paper between the face of the plate and the anvil, to give the copper a cushion to sink into where you beat it. The end of the punch, if too wide, bends the plate; 1-16-inch is about right. Heavy strokes of the hammer also bend the plate instead of pushing it out at one point. Many light strokes, with frequent inspections, is the trick. When the line seems sufficiently raised, cut off the ridge with your scraper. Use a slicing stroke, and before it's down flush with the plate give it a few wipes with stone, then finish with charcoal and metal polish.

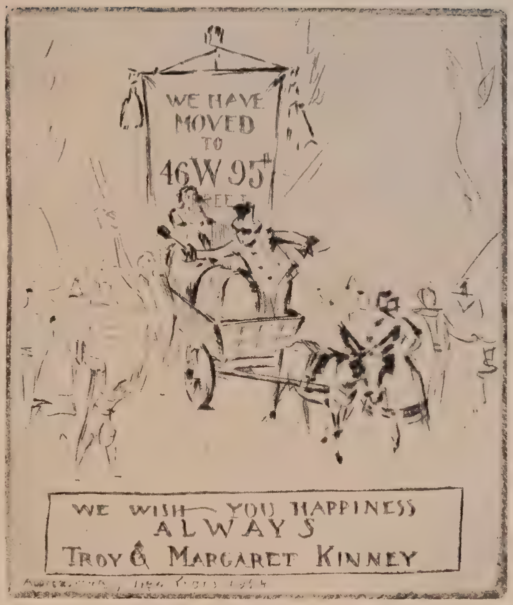
Keep your scraper sharp. *Sharp!*

After all, the mechanics are the least of it. You will quickly find a happy way to record all you know about quality of line. Conversely, there is no magic in the intaglio line. It will yield no more than its author knows and feels. Composition is the main thing, as in everything else. The better the composition the better the etching. Some of the supremely skillful etchings of the past are little more than technical demonstrations. The masterpieces reveal an initial thought motivating a man who, sometimes almost clumsily, invented means of getting his lines and spots into the metal.

Architects, by virtue of education and practice, are familiar with clean-cut pattern, and clean-cut pattern is one of the things that copper lends itself to cheerfully. Tonality is a study all by itself and its rendering on copper requires great experience and usually a lot of indirect work. Architects beginning to etch therefore usually chose tonal subjects. You will save yourself considerable wear and tear by getting past the ravages of the tone bacillus as soon as possible.

I say copper. Zinc is cheaper by an invisible margin, and some people profess (doubtless sincerely) to like it. It is softer, and cuts more readily than copper, which after all cuts readily enough. But it does not "beat out" as neatly as copper; it is difficult to polish after you've roughed it up with charcoal; its bur (if you try to avail yourself of it) will hardly stand half a dozen impressions. The ideal copper for dry-pointing is hand hammered; not hard, but very tough; but it is practically impossible to get. So I use pure Calumet copper, rolled. (The alloyed is harder and more brittle.) This is supplied by William H. Snyder & Co. I understand the American Steel and Copper Plate Co. are also satisfactory to deal with.

Scrapers and burnishers are handled by John Sellers Sons. For points I use lithographer's needles from the Senefelder Lithographic Supply Co. Cheap, just the right texture of steel, and I shape them to suit myself. (A small grindstone is desirable, and an oil stone is essential.) You'll need a good glass, about the power of a strong reading glass; see that it does not distort; get it from a good optician. Another item not previously mentioned is a paper screen, to filter the light. The lines in a plate are most easily seen in a glance-light. But a direct light glancing from the plate is dazzling, which in turn makes the lines difficult to see. We therefore stretch tracing paper or tracing lines over a canvas stretcher or other frame, and rig this up on the drawing table close up to the window and see your plate perfectly. As you proceed rub a little ink (softened with glycerine) into the lines, and you'll see them easily.


WE HAVE MOVED TO 46 W 95 STREET
WE WISH — YOU HAPPINESS ALWAYS
TROY & MARGARET KINNEY

Charcoal, especially prepared for polishing, snake stone or water-of-Ayre stone and polishing felt are sold by William Dixon. If you plan to print many impressions, steel facing is desirable and — despite current supersitition — not detrimental: The F. A. Ringler Company are the people for that. If you haven't the time, facilities, knowledge or inclination for printing, Fred Reynolds will take care of you. If you have these attributes plus about $65.00, the Model Novelty Company will sell you a handy little bench press.

Thinking over the usual questions in regard to the processes that have been mentioned, the most common of those unanswered probably refers to the means of placing the design on the plate, to start with. Many people trace; either with gelatine or by means of a stylus pressing on paper. To make the former, get sheet gelatine prepared for the purpose and supplied by your artists' materials dealer. Fasten it down over your drawing and trace with a dry-point needle. Scrape away the bur with your scraper. Rub over and into the lines white chalk, or chalk of any color that will show against the ground on the plate; then carefully wipe the surface of the gelatine clean. Thumb tack your plate onto a drawing board and thumb tack the gelatine (lines down) over the plate. A light pressure along the lines by means of burnishers of thumb-nail will transfer the chalk lines onto the plate; the design of course reversing the original drawing, the final print again facing the same way as the drawing. If your design contains lettering this is the way to trace it, so it will come out right in the print.

To trace directly from your drawing, the drawing need only to have been made on fairly soft, thin paper. Rub chalk into the back of the paper, fasten the paper down over the plate, and trace the lines with a stylus. To furnish a slightly adhesive surface to hold powdered chalk, you can pour on a film of liquid etching ground. This too is supplied by Sellers. Doubtless a score of other materials would do as well, but the one mentioned is the one I happen to know and use. After the design is lightly needled in, the ground can be washed off with kerosene or turps. If you trace, it is necessary to avoid the pitfall of spiritless rendering. Establish in the plate very carefully the essential points in your drawing and those only. Then *render* the rest of it, using your careful tracing only as a guide but not as a thing to absolutely duplicate.

Or, you can draw on copper with a 2B or 3B pencil, if you first remove the polish by rubbing the plate lightly with charcoal in water. Afterward you can restore the mirror polish with metal polish. Or not, as you prefer. Some etchers leave the surface given by fine charcoal, as such surface insures a certain amount of "tone" or tint. *Chacun à son gout.*

It is a question if printing can be described intelligibly, especially if the explanation is brief. Hamerton is the standard on the processes of etching, printing included. The best way to learn, of course, is by observation of and explanations by a capable printer. However, here goes, synoptically.

George Wix supplies ink: plate ink, it's called. Warm your plate, meantime spreading out a spoonful of ink on a flat slab—plate glass for instance. Dab the ink up on a dabber, and with this dabber dab it onto the plate and into the lines, covering everything.

Now, in parenthesis, a dabber is a ball, cloth covered and springy, three or four inches in diameter. For the center, take a wad of curled hair; surround that with a covering of cotton, thick enough to keep the hairs from jabbing through. Cover the whole with soft cloth, such as a piece of printing blanket, tying the cloth on. Between times of use, cover it with vaseline, so it won't harden, and tissue paper to keep grit from settling on it.

Your plate is covered with ink, and warm—not too hot to touch. To wipe it, take a smooth-faced wad of tarleton, or mosquito netting, from which you have previously massaged and shaken out the starch and which you have slightly "dirtied" with ink, so it will not be so absorbent as to lick the ink out of the lines. Your job is to get the ink off the surface of the plate while leaving the lines fully charged.

Wipe the plate 'round and 'round, not bearing any more than you can help. Picture the mesh of the cloth skinning the ink off the surface, and know that bearing down will "rob" the lines.

When you've taken up enough to "foul" your rag, so it will take up no more, possibly the plate will not yet be clean enough. If not, go at it again with your second rag. It is impossible since 1914 to get the most desirable kind. The same material is usually employed for the second rag as the first. Make the wad the same way as the first (avoiding folds or edges on the wiping face) and slightly "dirty" it, as you did the first. The second rag will probably bring the plate to as "clean" a wipe as you'll want. If not, give it a hand wipe. Dirty the heel of your hand in ink, dip it into jeweler's chalk, dust off all the chalk that will readily come off, and wipe lightly, briskly across the plate, *not bearing down.* If you do you'll "rot" your lines. If a proof shows your lines watery or rotten, the fault is likely to be due to having wiped the plate while too hot.

The paper must be wet through, but not have water on the surface. Treatments are of infinite variety. This explanation is sufficient: sponge the paper, or if it is very hard-sized, soak it. Then brush the surface water off with a clean clothes brush of soft bristles, 2 x 6 inches is big enough, looking across the plate toward the window, getting a glance-light on it. You can tell after a few attempts whether the surface is right or not.

Again a parenthesis, this time about paper. Plate printing paper, typically, is hand-made line, not stiffly sized or even (in some varieties) not sized at all. Whatman just about attains to my ideal. H. Reeve Angel & Co. are Whatman's American representative; ask for Pale Antique, or Antique, plate printing paper. Or, if you want something already at hand your Whatman water color paper will take a nice impression if sufficiently soaked. It is heavily sized, and may swim in the bath tub several hours without any harm. Still better,—if you are going to print an edition—cut your paper to the size you want, drag them through water and stack them evenly on a piece of glass. Put another glass on top of the stack, weigh it slightly, and put a damp cloth over all to keep the edges from drying. In 24 hours (or less, if it's soft) the paper is in fine condition for printing; perhaps requiring just a bit of brushing.

A great variety of Dutch and Italian papers are handled by The Japan Paper Co. Papers have various properties: to "pick up" tint to the limit; to do full justice to an aquatint or a mezzotint; and so on through a list of distinctions both real and imaginary. Try specimen swaps with other people. There used to be an "artistic" fashion of printing on thin, soft, and altogether flimsy Japan. The fashion has passed, as it ought to have before it started. Which makes it unnecessary for me to say anything about that particular kind of paper. I know of no other kind made for the purpose that isn't at least fairly satisfactory.

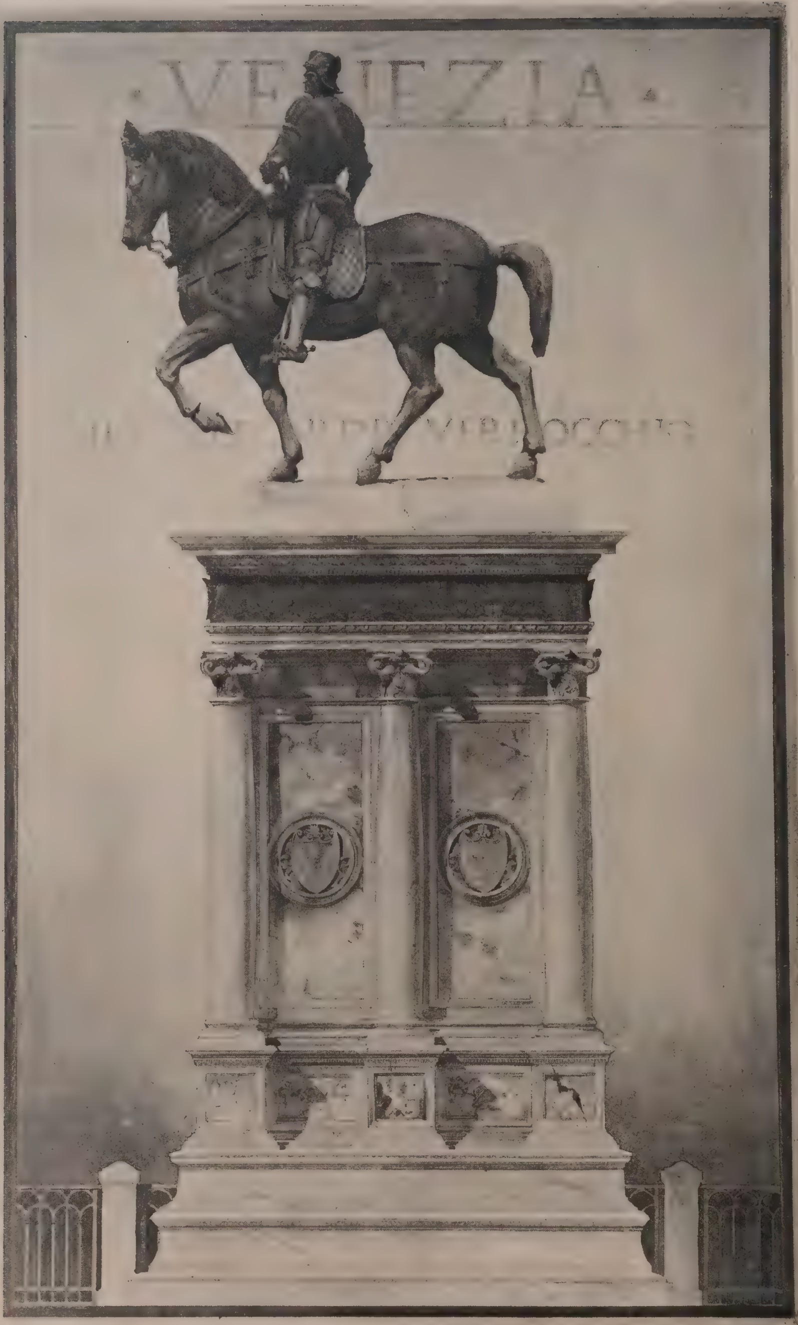
Retroussage is a process of at once strengthening and "warming" lines, after the wiping of the plate is complete. Take a wad of soft, clean cheesecloth. When your plate has rewarmed on your heater, pass the cloth lightly over the plate, very lightly and slowly, with a motion of twisting back and forth as your hand travels. What it is and why it is nobody knows; but properly done it adds immensely to the "etching quality" of lines.

On your press you have (ordinarily) three felt blankets, made for the purpose. (Louis Gehlert.) A smooth comparatively thin one, the "face." A thick springy one next, and last the "back"—also comparatively thin. I usually test the pressure before I start, by means of running a blank plate through, with a paper of the thickness I am preparing to use. Get a good deep impress, not enough to tear the paper at the edges of the plate, and have your pressure equal on both sides. Plates are bevelled so as to permit a good pressure without cutting the paper or blankets.

How warm to have the plate when you print is always a question to be settled by the character of the work and the effect desired. Pull through slowly, and tack out your proof while it's still damp.

Then take a look at it and either (a) congratulate yourself or (b) earnestly kick yourself that it isn't better.

Note—For the convenience of our readers we give below the addresses of those mentioned by Mr. Kinney in this article from whom supplies and equipment may be obtained and of Mr. Fred Reynolds to whom many etchers send their plates for printing. Wm. H. Sellers & Co., 67 *Spring St., New York; American Steel and Copper Plate Co.,* 132 *Nassau St., New York; John Sellers Sons,* 75 *Warren St., New York; Senefelder Lithographic Supply Co.,* 32 *Greene St., New York; William Dixon,* 119 *Fulton St., New York; F. A. Ringler Co.,* 39 *Barclay St., New York; Fred Reynolds,* 17 *E.* 14*th St., New York; Model Novelty Co.,* 42 *W.* 39*th St., New York; Chas. Wix & Co.,* 45 *Vesey St., New York; H. Reeve Angel & Co.,* 7 *Spruce St., New York; The Japan Paper Co.,* 109 *E.* 31*st St., New York; Louis Gehlert,* 204 *E.* 18*th St., New York.*—EDITOR.



Measured Drawing by John Russell Pope. Colleoni Monument, Venice, Italy.

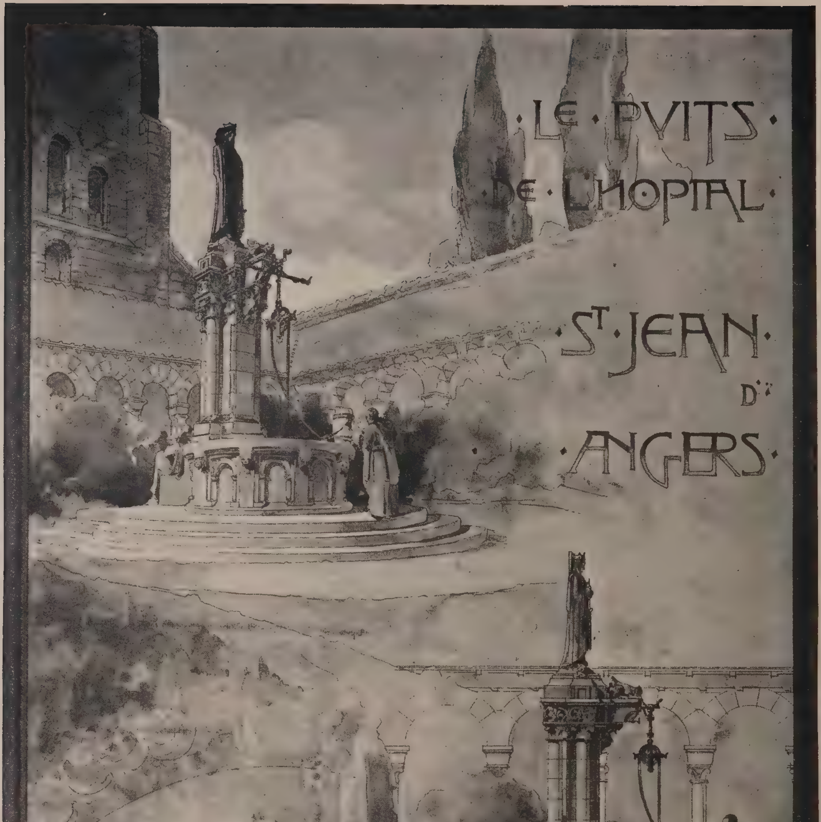
MASTER DRAFTSMEN, VIII

JOHN RUSSELL POPE

WHEN, in 1895, John Russell Pope, then a student at Columbia College, "killed two birds with one stone" by winning the "McKim Roman Scholarship"—as it was then called—and the Columbia Fellowship in Architecture with one design for "A Bank for Savings" he drew the attention of all American students of architecture by the good classical quality of his design and the scholarly style of his drawing and rendering. The prevailing style of architectural design in the United States at that time was still influenced by the "picturesque" character of medievalist designers. The program to which Mr. Pope worked was also used for the Rotch Scholarship, won that year by Henry B. Pennell of Boston, and for the University of Pennsylvania Travelling Scholarship, won by Percy Ash of Philadelphia. The three designs were far apart in conception, in architectural style and presentation. Mr. Pennell adopted an ornate renaissance style employing a dome with low drum and lantern; Mr. Ash a somewhat Florentine type, also renaissance in character. Mr. Pennell presented a brilliant water color perspective; Mr. Ash rather ignored presentation; while Mr. Pope presented his elevation and plan in the style of an *envoi de Rome* of a French *Grand Prix pensionnaire*. The design showed some influence of the Fine Arts Building at the Chicago World's Fair, which was produced by, or under Charles Atwood, with the help of Alexander Sandier—a pupil of Emile Bénard, of Havre, to whose *Grand Prix* design for a Fine Arts Building the original qualities and composition of the Chicago building were easily traceable. Mr. Pope's design also bore unmistakable evidence of the influence of the classical work of Bruce Price in whose office Mr. Pope was employed.

John Russell Pope.

Pope was a very serious, unusually painstaking young student and the studies which he carried on in Greece and Italy, as represented by a number of splendidly finished "restorations" (or drawings made from existing buildings and fragments) sent back to Columbia College, bore an imprint of thoroughness of study and original investigation, that cannot be said to be characteristic of the work of many American travelling scholars. I have, spread out before me, as I write, ten sheets of his drawings made at the site of the Erechtheum and one or two other buildings on the Acropolis. They are drawn on sheets 22 x 30 inches. All of the mouldings are marked off at quarter inch distances and numbered. The full size profiles were drawn with the aid of an apparatus, fashioned by Mr. Pope, that consisted of a folding drawing board and level with an extension T-square. One end was pointed to follow the actual profile of the moulding, the other end of the extension pointed to register on the drawing board every quarter of an inch. These drawings have the unusual merit of being perfectly accurate, so correctly made that they would do credit to a watch maker for fineness and so fine that I fear reduction to the page size of this magazine may prove an impossible task for the process engraver. In spite of mechanical exactitude they are pleasing to the eye. There is an ease of movement of the free hand line through every one of the finely marked off points that shows a perfect grasp of the form of each complete outline in the eye as well as the hand of the draftsman. These drawings do not correspond in all respects with other restorations but as they were made for Mr. Pope's own subsequent use in practical application of Classic precedent, they probably have proved a valuable check to him upon other available restorations. An interesting point is observed in connection with the abacus of the caps of the small Doric order of the Propylaea. They have an inward batter of 3-16 of an inch in



Measured Drawing by John Russell Pope. Restoration of the Well at the Hospital of St. Jean d' Angers.

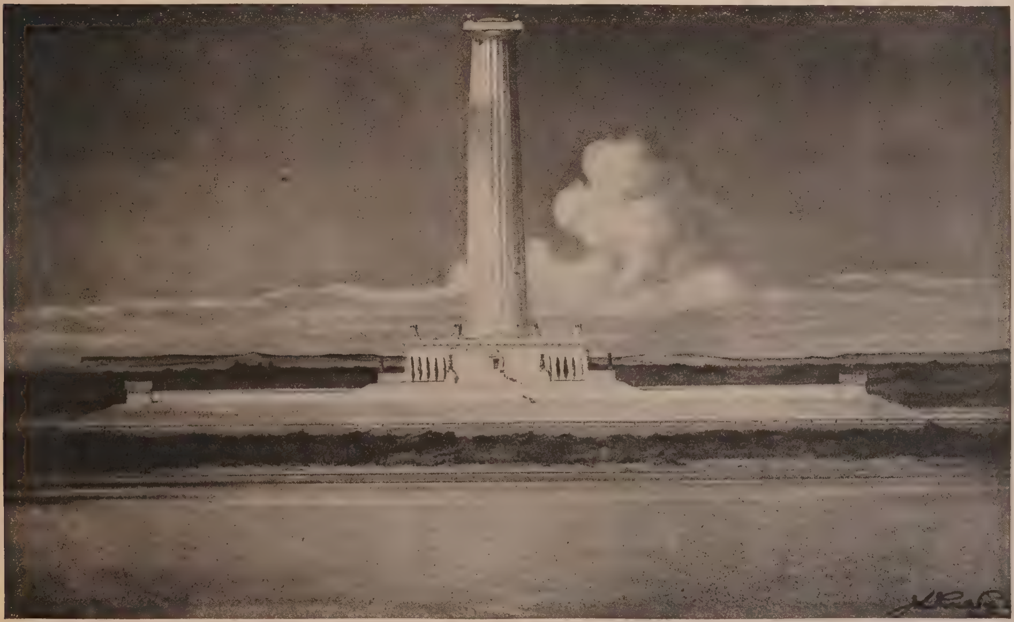
8 1-8 inches of height—something which, if it is well known has, at least hitherto, escaped what the writer believed to be his close study of many such restorations.

Pope's method of learning a subject did not end with merely sketching it. But while observing it from every angle he actually measured and drew the entire building in the field and made notes of material, texture and color—a method that involved effort, preparation and permits. The use of ladders and instruments and climbing upon the old monuments of France and Italy seldom meets with popular approval. When Mr. Pope was making the drawing of Verrochio's Colleoni, which is a large water color, other difficulties were encountered. In most representations of this monument the splendid forward action of the sculptured group that impresses one in the original is lacking. The position of the horse in relation to the pedestal is not rightly shown. After Mr. Pope had spent a week or more on the measurements and drawing he sought an additional check measurement. He attached a plumbline to the ear of the horse, drew it down over the nose and definitely checked the point in question. Onlookers, however, did not apparently appreciate the seriousness of his endeavor, for a well-aimed ripe fig landed in the center of the drawing and a near-riot resulted. The drawing was rescued from a canal after things had calmed down.

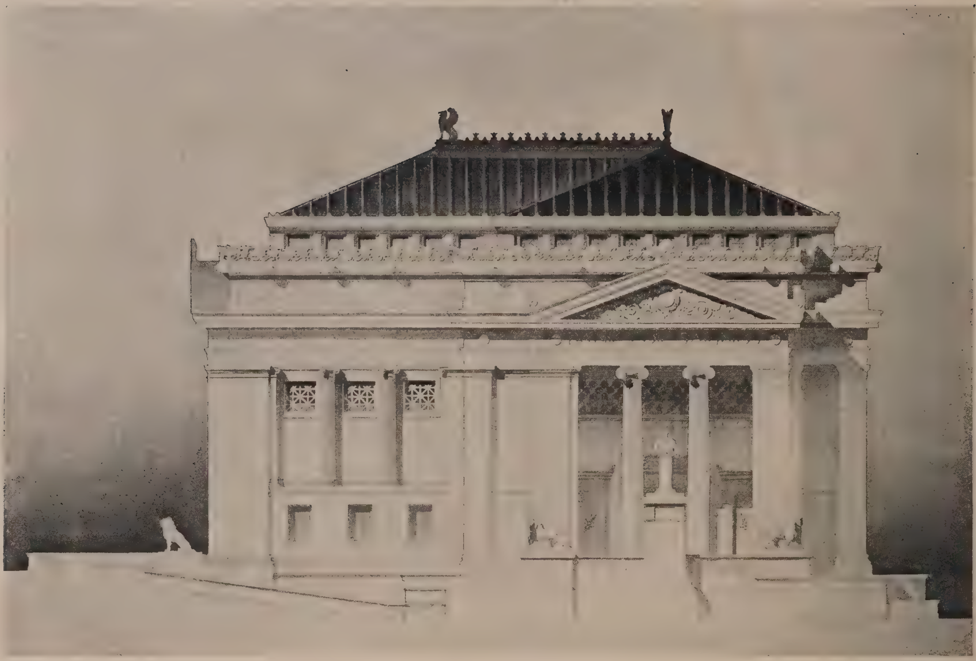
Mr. Pope's drawings of Italian architecture are mainly in pencil. Few have been published and fewer can be reproduced due to the fine technique and wear and discoloration of the paper. They are drawn with a light but sure touch and in the instances where color has been used and fixing of the line by the water has taken place they appear to have been drawn with a 60-H pencil—or perhaps one of those instruments with which doctors commit vaccinations!—and the representation is found chiefly in the washes. While Mr. Pope made his water colors rather as color notes than for the purpose of pictorial effect, the excellence of his sense of color reproduces the feeling of the original buildings vividly to anyone who has seen them; and one feels that the field of painting has lost something by the fact that Mr. Pope has been busy with a practice in architecture sufficiently extensive to prevent any continuous application to work in color or seek expression through the painter's media. Among his color studies the sketches of the interiors of Orvieto Cathedral and The Palazzo Vecchio at Florence possess the qualities of excellent color and a spirited technique that mark them with distinction. His drawing of the tower of Pistoia Cathedral is as charming as that beautiful tower itself—to me the finest of all the towers of Italy. One might visit many large exhibitions of water colors to find a single drawing as rich and subtle in color as this, and with all that a valuable architectural document as well.

Mr. Pope's work as a student at the Ecole des Beaux Arts, where he was a pupil of Mr. Deglane, was noted for the brilliant, spontaneous presentation of his designs—especially in the sketch problems which call forth the expression of the imagina-

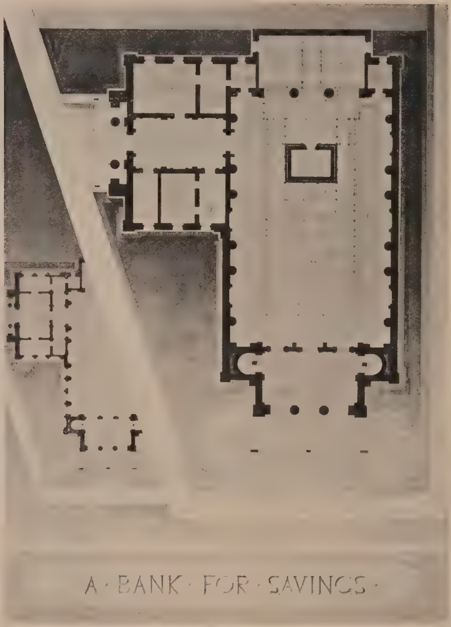
(*Continued on Page* 90)



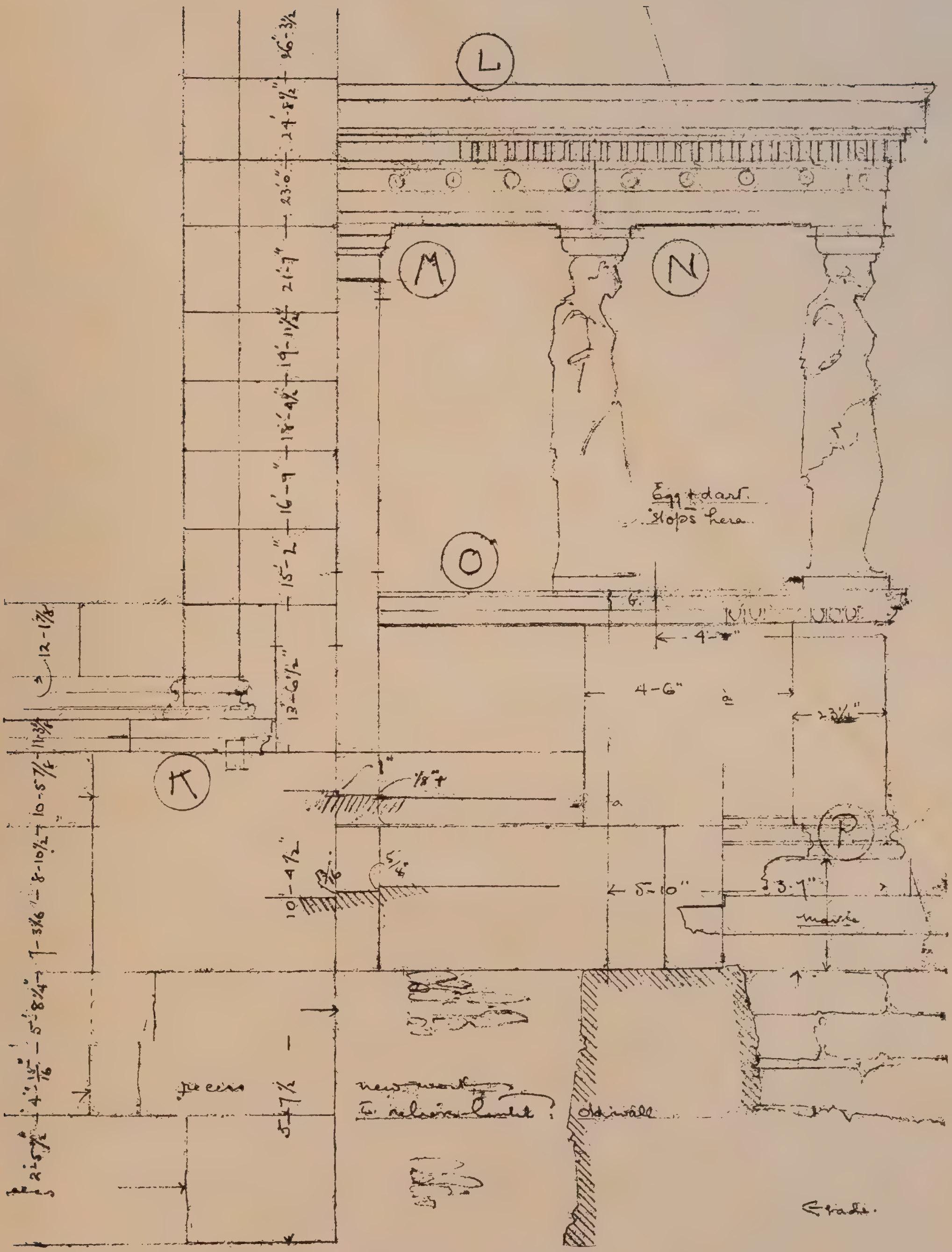
Successful Competitive Design, Monument of the Great Lakes. Drawing by John Russell Pope, Architect.



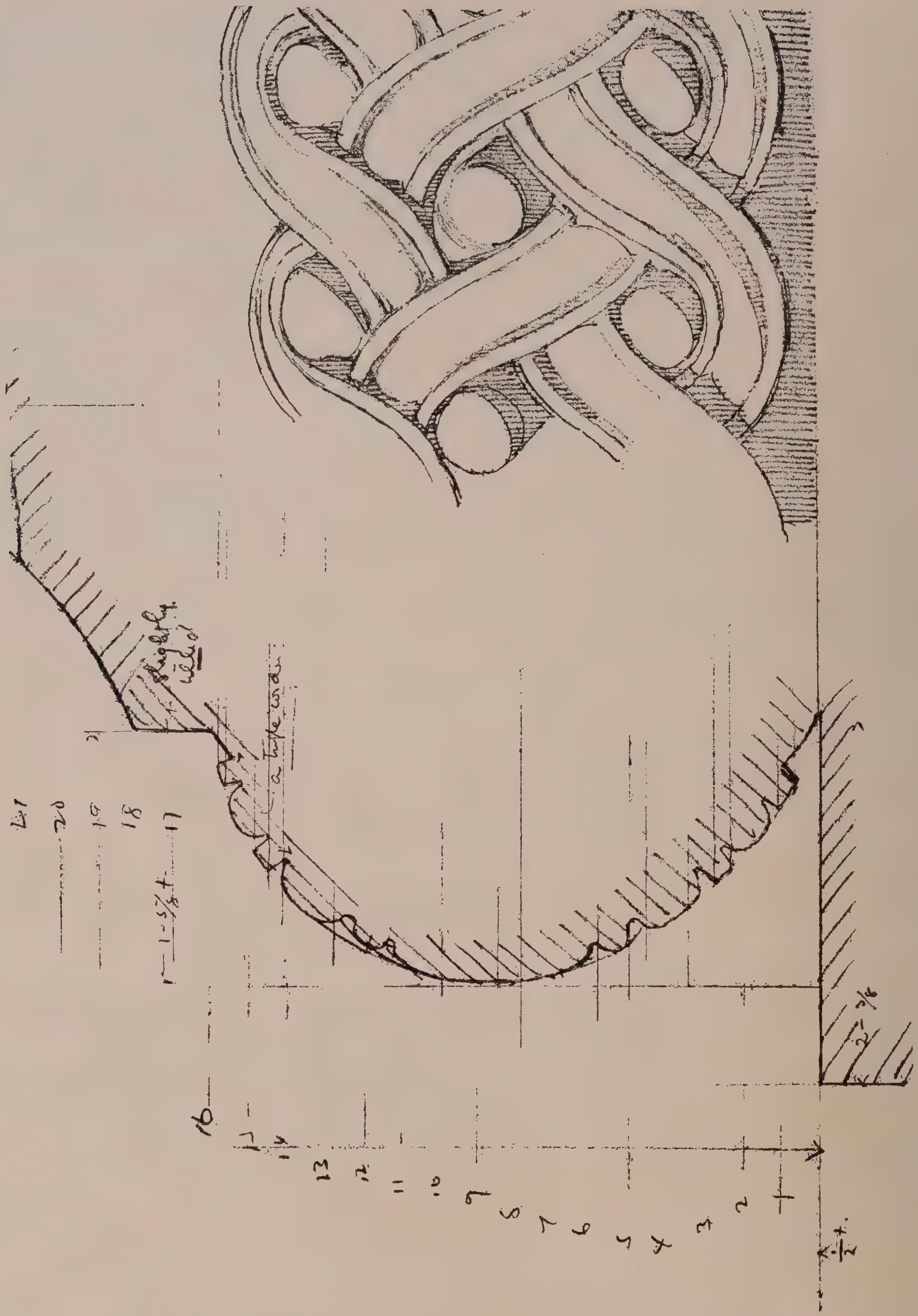
A Bank for Savings.



A Bank for Savings. Winning Design for the McKim Roman Scholarship and the Columbia College Fellowship in Architecture, by John Russell Pope, 1895.



Portion of Drawing of Erechtheum Details. Drawn by John Russell Pope.



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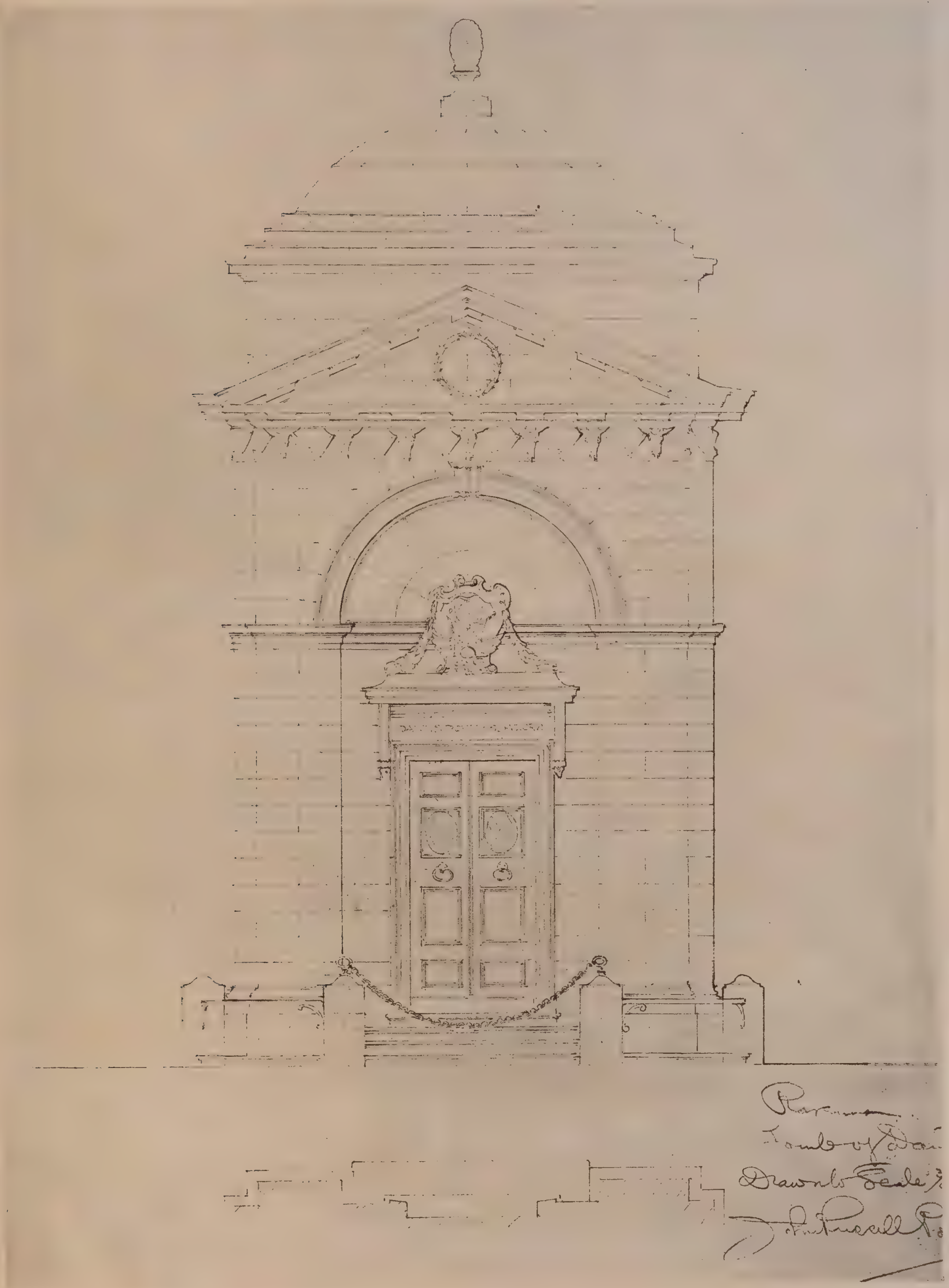
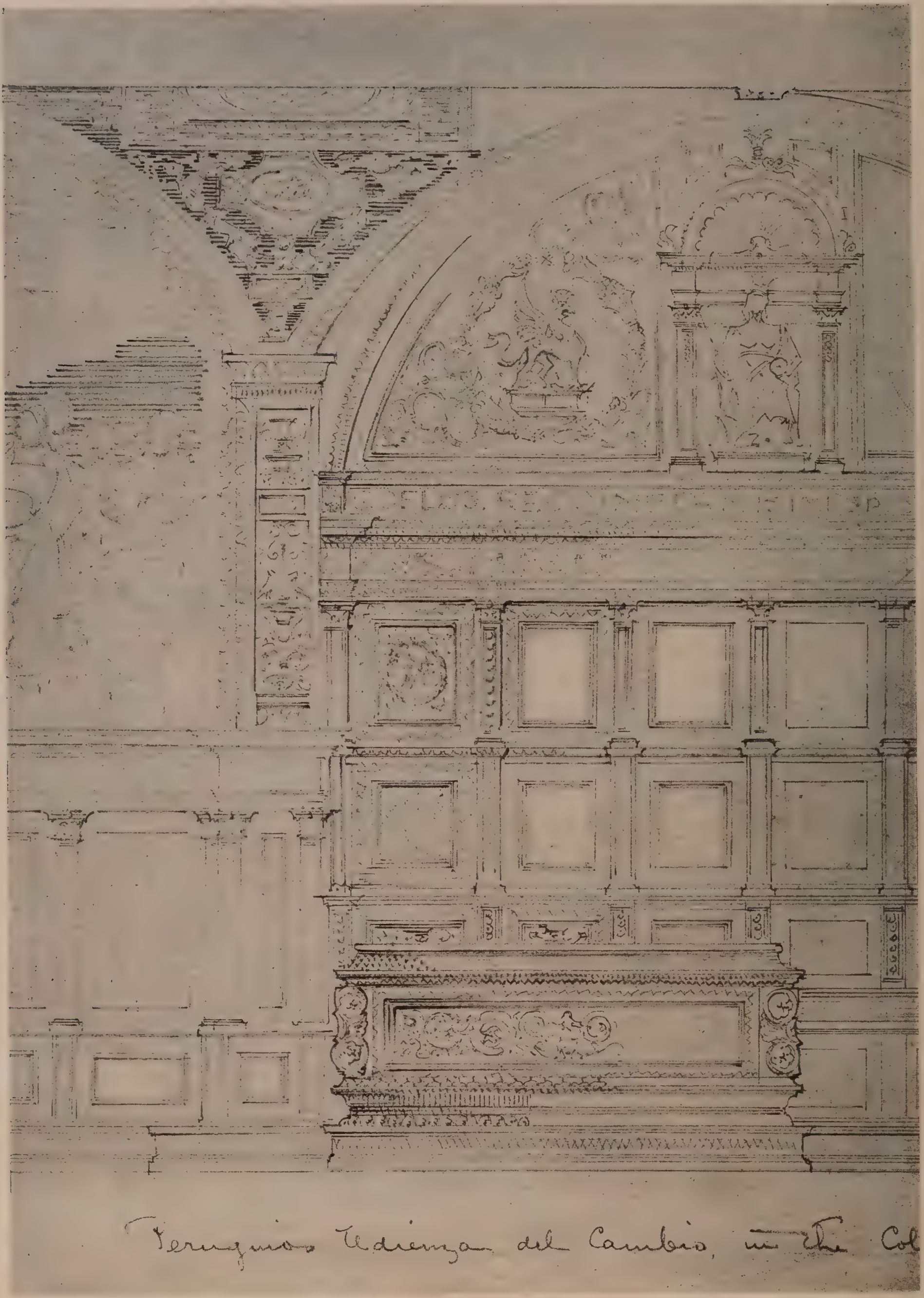
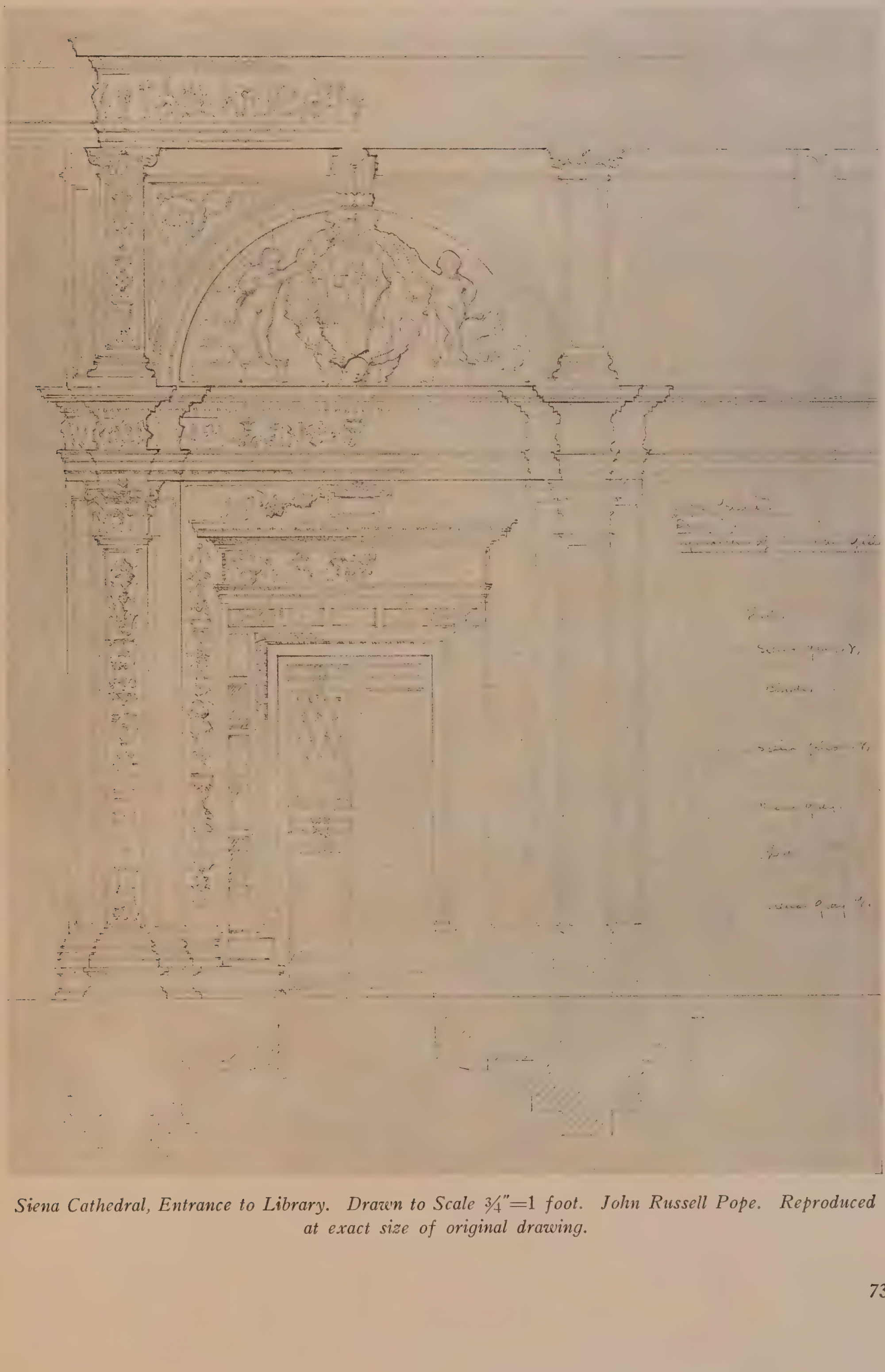


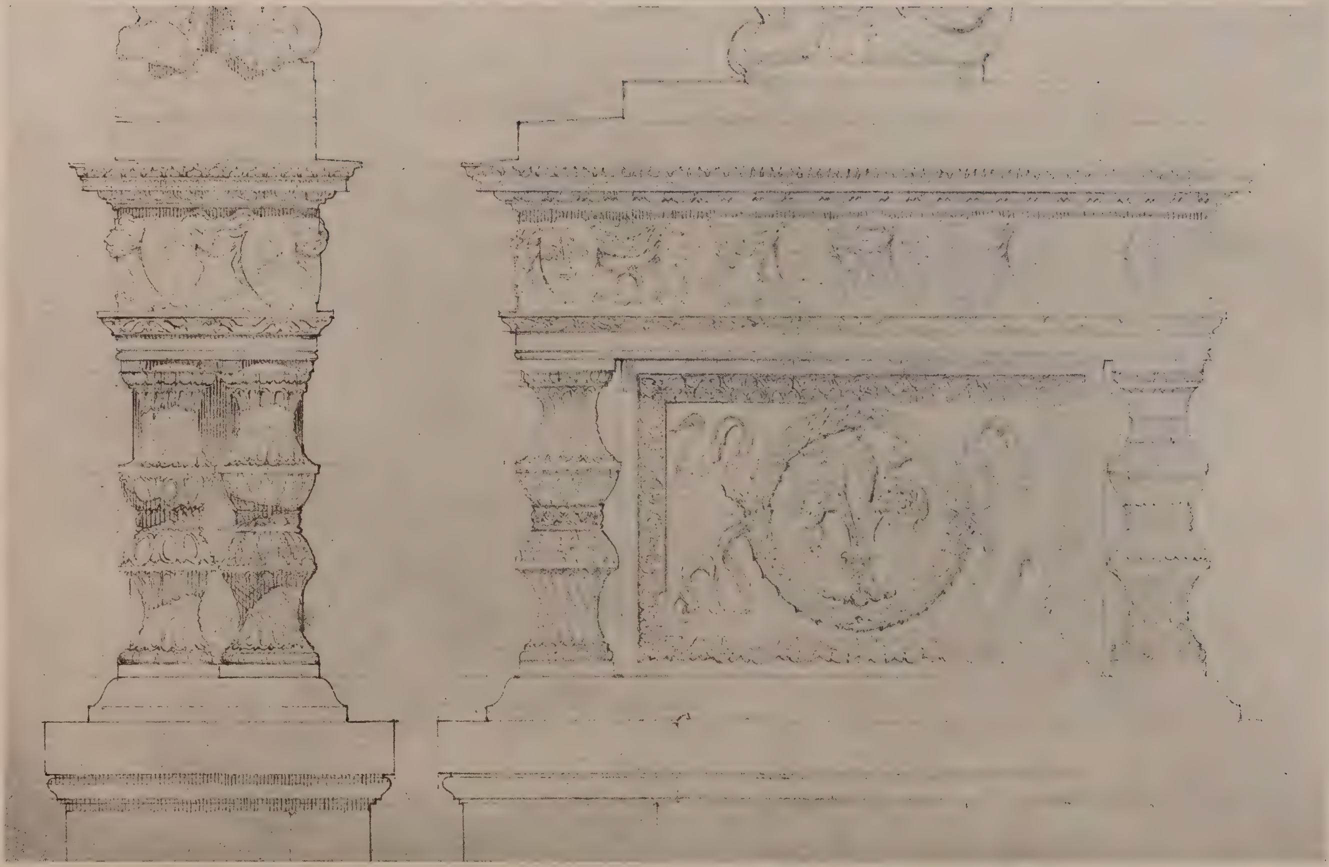
Tomb of Dante, Ravenna. Drawn by John Russell Pope.


Peruginos Udienza del Cambio, in the Col

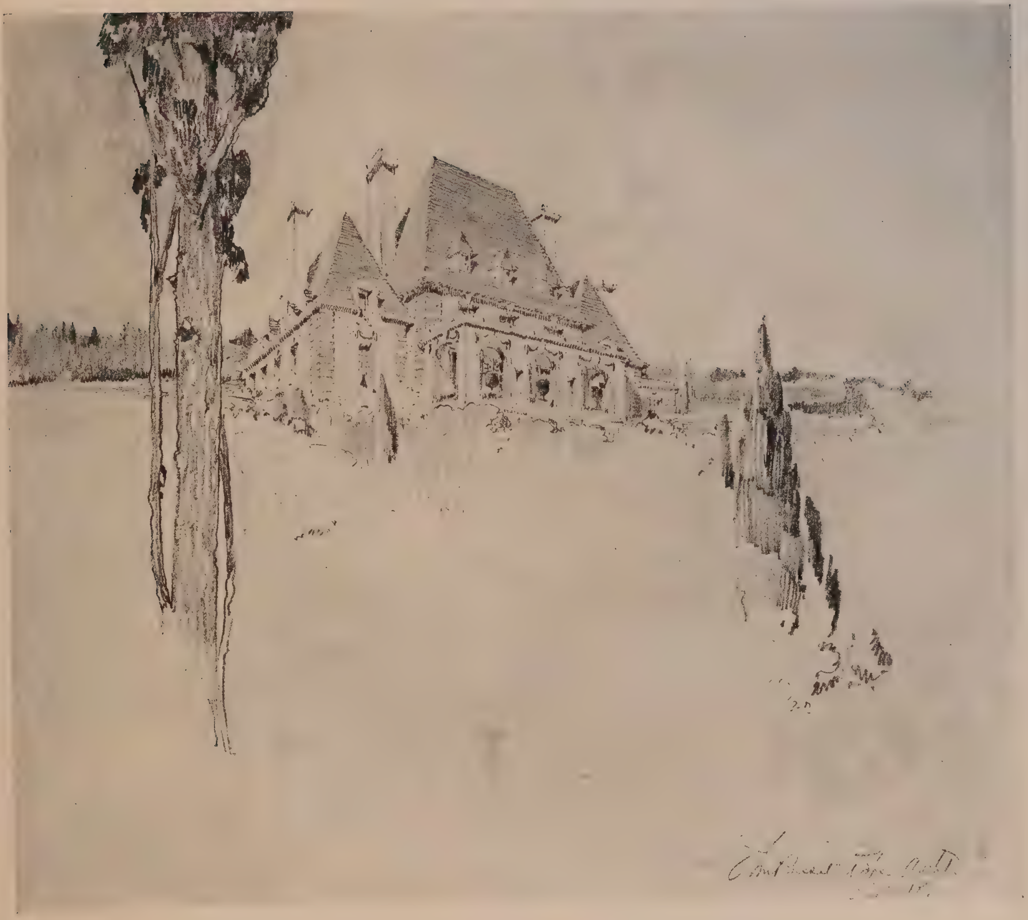
Peruginos Udienza del Cambio, in the Collegio del Cambio, Perugia. Wood Work by Dom. del Tasso, 1490-93. Drawn to scale, ⅜"=1 foot. Aug. 22, '96. Portion reproduced at exact size original drawing.



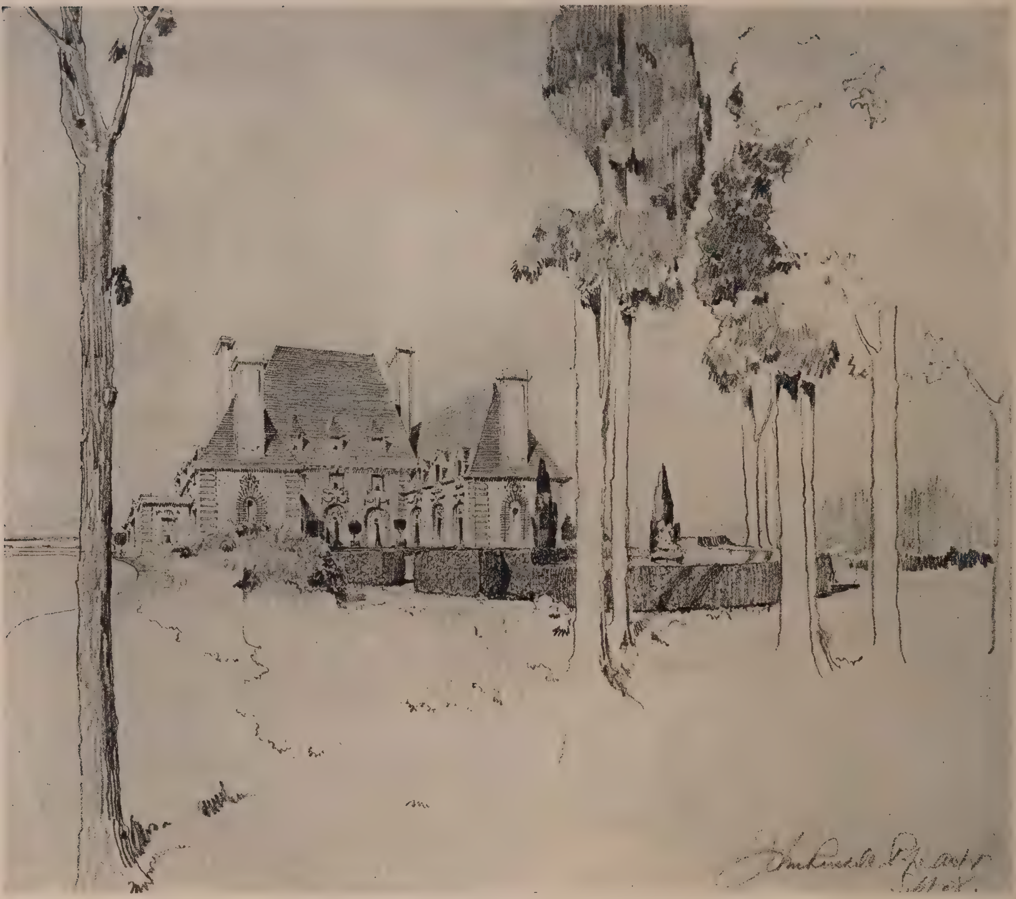
Siena Cathedral, Entrance to Library. Drawn to Scale ¾″=1 foot. John Russell Pope. Reproduced at exact size of original drawing.



Il Marzocco "Donatello," Florence. Drawn to Scale 1"=1 foot. John Russell Pope. Reproduced at exact size of original drawing.



Sketch Design for Residence by John Russell Pope.

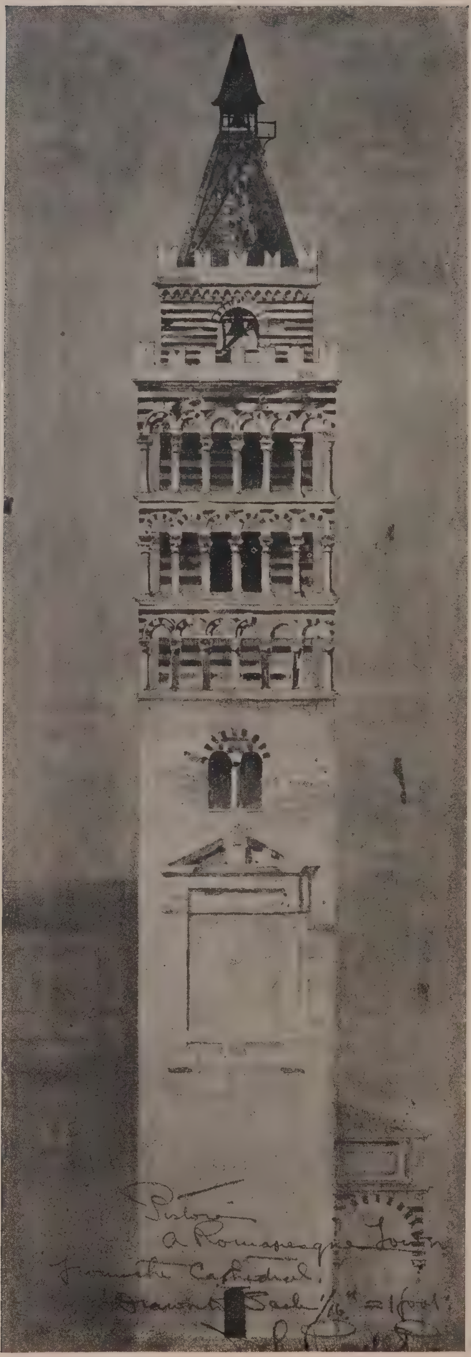


Sketch Design for Residence by John Russell Pope.

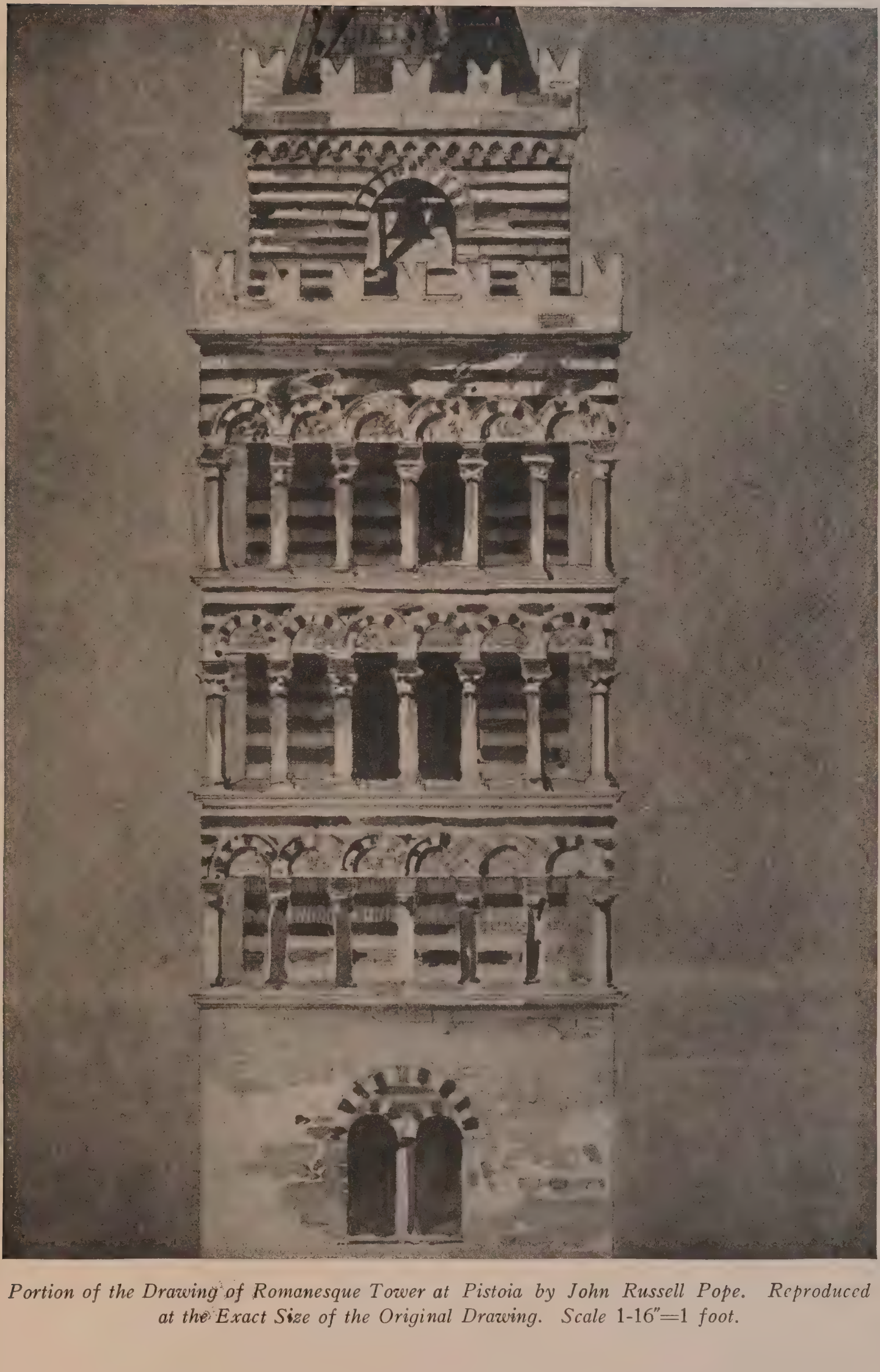
Cathedral at Orvieto.

Palazzo Vecchio, Florence.

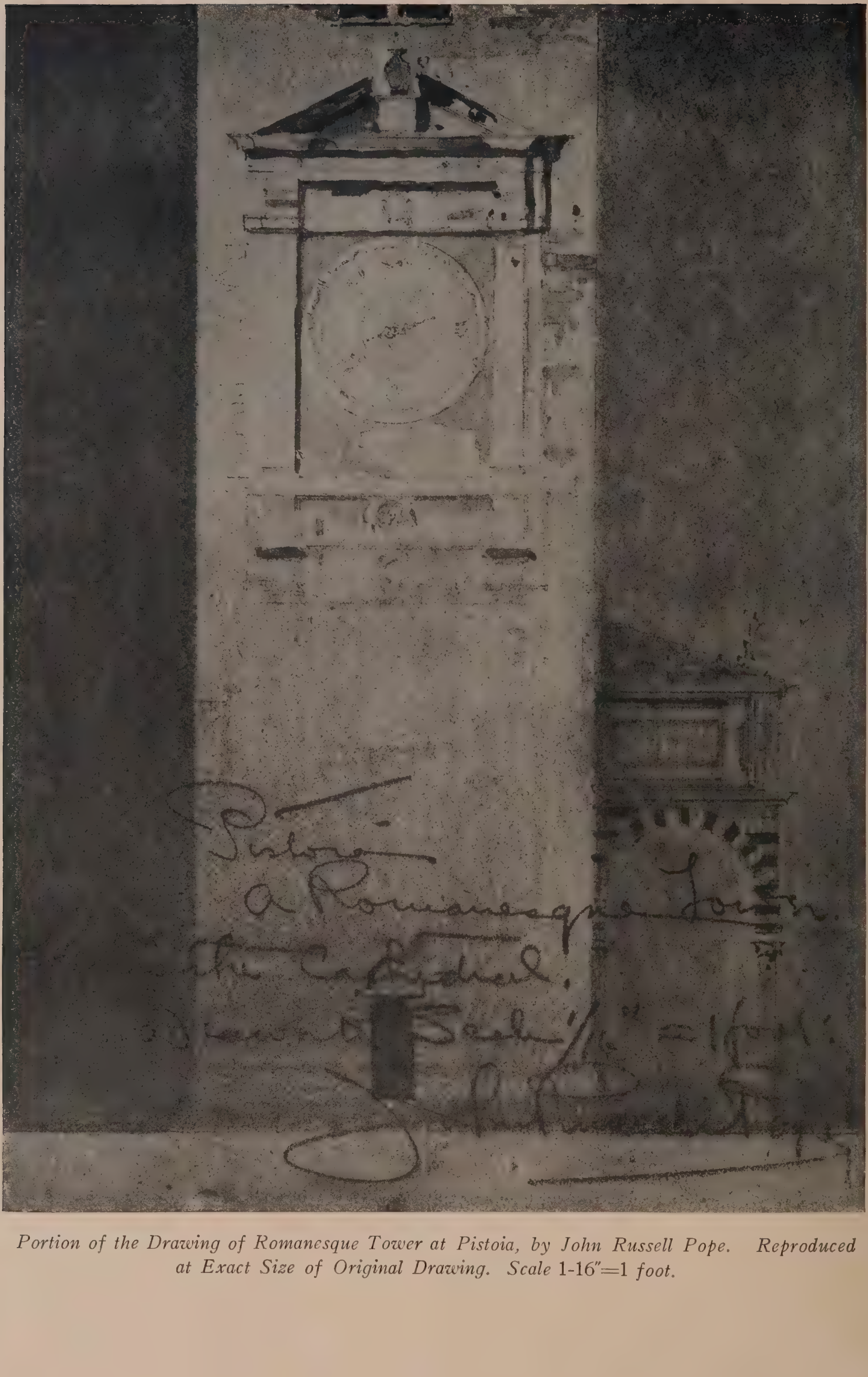
Water Color Studies by John Russell Pope.



Pistoia, a Romanesque Tower. Drawn by John Russell Pope.



Portion of the Drawing of Romanesque Tower at Pistoia by John Russell Pope. Reproduced at the Exact Size of the Original Drawing. Scale 1-16"=1 *foot.*


Pistoia
A Romanesque Tower.
the Cathedral.
Drawn to Scale 1/16" = 1 foot.

Portion of the Drawing of Romanesque Tower at Pistoia, by John Russell Pope. Reproduced at Exact Size of Original Drawing. Scale 1-16"=1 *foot.*

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THE AMERICAN ACADEMY IN ROME

FROM letters recently received by C. Grant LaFarge, Secretary of the American Academy in Rome, from Frank P. Fairbanks, of the School of Fine Arts, we quote the following items:

"The School of Fine Arts starts the year with a registration of twenty-two men, ten of whom are visitors or visiting students. Five additional rooms are available this year for scholarship holders because of a readjustment in the service quarters of the Academy.

"All but two of the Fellows of the Academy are in residence. Meyer, second year sculptor, has been to the States where he underwent an operation that requires him to omit work for a time. He has been sight-seeing since his return to Europe and will return to Rome the early part of November. Bradford, second year painter, is experiencing conflicting emotions in his travels in Spain."

"Of the senior men, Marceau, architect, is taking a detail of the exterior embellishment of the Pal. Montalvo in Florence, and is making a replica in scraff, Stevens, sculptor, is carving reliefs in marble and laying up his third year group of two adult figures and a child. Floegel, painter, has just recovered from a painful injury to his right eye, due to a spatter of lime which kept him quiet under treatment for several days. He is making over two fresco panels of life size figures unsatisfactory to him in his first essay.

"The second year architect, Deam, has returned from an extensive travel and is drawing up a monument to Leonardo Bruni, in the church of S. Croce in Florence.

"Newton, landscape architect, has laid out a plan and two sections of the Villa Medici in Florence, part of his required work. He has collected a variety of interesting garden details during his travels this summer.

"The first year men are dividing their time between sight-seeing, language lessons and work in their studio. Camden, sculptor, is modelling some heads, and Finley, painter, is beginning some trials in encaustic painting. Douglas, architect, is busy. All three men are showing eagerness to profit by their opportunities.

"Both Thompson and Watts, composers, are in residence.

"The new men to enroll this year are Horace Farnham Colby, sculptor, on a Fellowship from Cornell University, Otto F. Cerny, Architect, on the Le Brun Scholarship and Frederick Eiseman, Architect, on a Travelling Scholarship from the Chicago Architectural Club."

And from a letter from Tenney Frank, Professor in Charge, School of Classical Studies, the following:

"The School of Classical Studies has opened what promises to be an interesting year with William A. Merrill as the annual professor, Professor Van Buren remaining at his usual post, nineteen good students taking full work, and the government of Rome opening a vigorous campaign of excavations in the Augustan Forum. This dig, undertaken at last according to Corrado Ricci's long published plans, should, at the present rate of work, lay bare the whole floor of the Forum including the foundations of the temple of Mars Ultor before next summer. As is well known Professor Ricci expects to make important discoveries.

"The weather has permitted us to make an unusually detailed study of Rome and the neighboring towns. Professor Van Buren has conducted his usual Campagna excursions on Saturdays, while Professor Curtis and I have each given ten mornings to the survey of Roman monuments. Professor Merrill has now begun his lectures and exercises in Martial (thrice weekly), and presently Professor Van Buren will begin his six museum lectures on Sculpture."

SAN FRANCISCO ARCHITECTURAL CLUB

MEMBERS of the San Francisco Architectural Club are busily engaged in rehearsing their parts for the annual Hi-Jinks, which will be held next month. Felix Raymand, Chairman of the Committee in charge, reports satisfactory progress in arrangements for the affair. Sorosis Hall, on Sutter St., has been secured for the affair. The event will be staged on the evening of Saturday, Dec. 13th, 1924. Tickets are being distributed to the members and their friends.

To the members of the Club and their friends who have had the privilege of attending the past Hi-Jinks of the Club, which are held at the close of each year as a climax to the season's activities, there come fond recollections of a happy and an enjoyable evening replete with many surprises in the way of entertainment, and good things to eat. According to reports from the Committee in charge this season, there is every reason to believe that the affair this year will be equally as successful and enjoyable as the ones of preceding years.

Under the title of "Christmas Follies" will be presented an evening of entertainment, which will be made up of a number of acts, plays, specialties, musical numbers, etc. One of the events of the evening will be a musical comedy written, arranged and staged by one of the Club members.

The various parts are all taken by Club Members, and according to the progress being made in rehearsals, it bids fair to become a masterpiece of the terpsichorean and vocalistic arts.

There is also promised some surprise numbers, which will be looked forward to with a great deal of interest, and which of necessity can only be hinted to at present.

The Club members and their friends are looking forward to the affair with a great deal of pleasurable anticipation, and the committee in charge promise that they will not be disappointed.

THE ARCHITECTURAL BOWLING LEAGUE OF NEW YORK

STARTING with this month's issue of PENCIL POINTS, the Executive Committee of the Architectural Bowling League of New York will release for publication a series of letters received from prominent architects in this city in which they give their own personal views on the work we are doing towards organizing an Architectural Club. These letters will be published in the order in which the Secretary received them.

It is with a feeling of pride as well as pleasure that we announce the following endorsement from that great dean of architecture Mr. Thomas Hastings. (I might add by way of explanation that the invitation which Mr. Hastings refers to was an informal gathering of public spirited men who saw the great possibilities in such a club. The dinner was purely spontaneous and, as Mr. Hastings says in his letter, was given on extremely short notice.)

August 26th, 1924

Dear Mr. Valentine:

Referring to our meeting of this morning, I am writing to tell you how sorry I am that because of so short a notice I will be unable to be present at your meeting tonight. I am heartily in sympathy with the work you have in mind and the object of your club, and I feel sure that it will be of untold benefit both to draughtsmen and practicing architects alike. As I said to you, there should be some way by which men in such a club can find their place with practicing architects or that practicing architects can find the men they want. The social benefits of such a club also appeal to me and I hope that you will see your way clear as regards educational work to work hand in hand with the Beaux-Arts Institute of Design. I am convinced that they would welcome you to co-operate with them at any time.

Please do not hesitate to call upon me if there is anything which you can think of to help you in this proposed organization and believe me with kindest regards,

Very sincerely yours,
(Signed) THOMAS HASTINGS.

A very interesting letter from Mr. Whitney Warren will appear in the January issue of PENCIL POINTS. Mr. Warren as we all know is devoting his entire career to the creation of monumental buildings and has done more perhaps than any other single architect towards beautifying the Metropolitan District of this great city.

The first three games of the series with the Architectural Bowling League of Detroit, Michigan will be rolled off Tuesday evening, December second at the Hotel Shelton. Our first team under the management of Mr. M. L. J. Scheffer will bowl a dummy team, judges to be appointed by the hotel. The games will start promptly at 8:00-9:00 and 10:00 p. m., respectively, Eastern Standard time, which will correspond to 7:00-8:00 and 9:00 p. m., Detroit time. Scores will be exchanged by telegraph at the end of each game and a copy of the games complete will be mailed the following day. The second tournament of the series will be held Tuesday evening, January sixth at the same hours. Mr. Scheffer is now booking games with other amateur teams averaging about 700 and any who are interested should get in touch with him at No. 367 Lexington Avenue, N. Y. City.

Our official schedule and year book for the season of 1924-1925 is just off the press and will be mailed free of charge to any bona fide architectural club on written request.

Referring to an article in the November issue of PENCIL POINTS page ninety-five, paragraph two, line six, "Activities of radical obstructions" should read "activities of radical obstructionists."

N. T. VALENTINE,
Hotel Shelton, New York City. Secretary

PERSONALS

DOYLE AND MERRIAM, ARCHITECTS AND ENGINEERS, have removed their offices to 1408 Smith Building, Seattle, Washington.

KOEHL AND DINARDO, ARCHITECTS, have removed their offices to 1720 Euclid Avenue, Cleveland, O.

KOERNER ENGINEERING CO. have removed their offices to 908 Syndicate Trust Bldg., St. Louis, Mo.

LORENZO HAMILTON, ARCHITECT, has been appointed an instructor in second year design and sketching in the architectural department of the Yale School of Fine Arts. Mr. Hamilton will maintain his offices at 119 W. Main St., Meriden, Conn.

ELZNER & ANDERSON, ARCHITECTS, have removed their offices to Denton Bldg., Cincinnati, O.

A. C. EDWARDS, ARCHITECT, has removed his offices to 13906 Orinoco Avenue, East Cleveland, Ohio.

VICTOR L. S. HAFNER, ARCHITECT, has returned to America and is now at Room 901, 373 Fourth Ave., New York.

We will pay 25c each for copies of the October, 1924, issue of PENCIL POINTS delivered to this office in good condition, on or before Dec. 20, 1924.

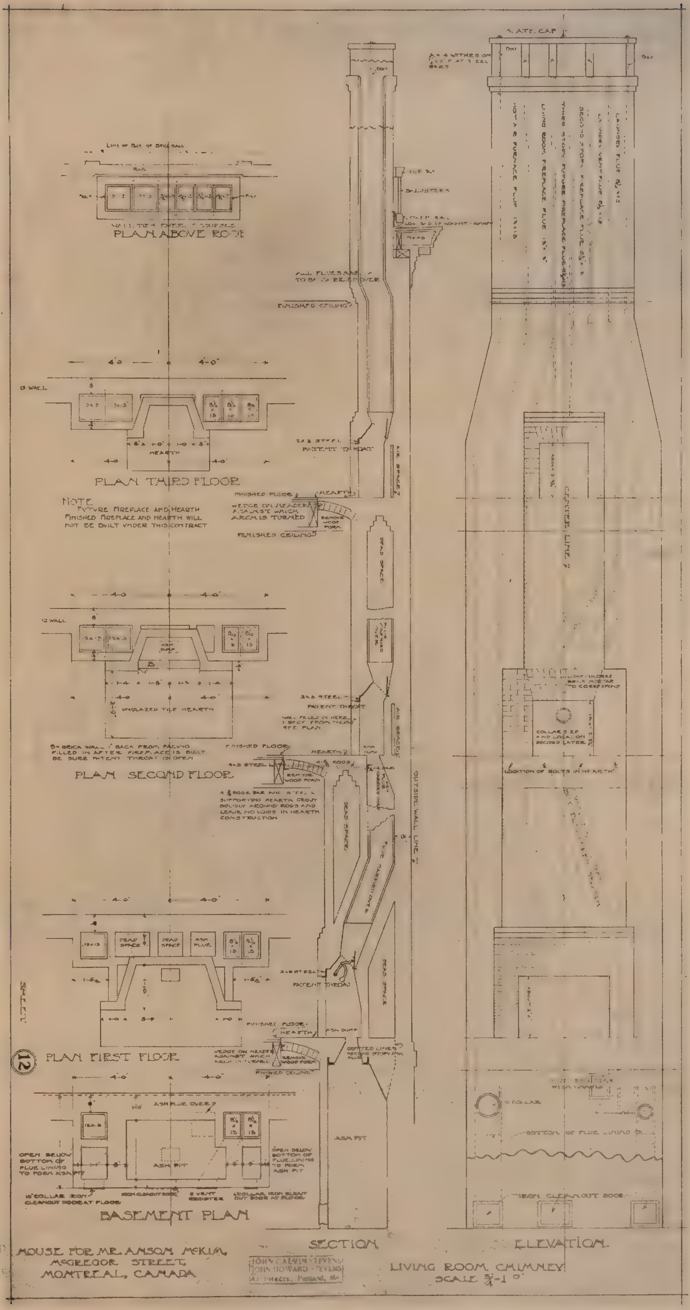
FERDINAND EISEMAN

FERDINAND EISEMAN, winner of the Chicago Architectural Club Foreign Traveling Scholarship was born in Chicago, Ill. in 1903. He was educated in the public schools and later attended the Carl Schurz High School where he completed a four year course of study. Following this he entered the office of Schmidt, Garden & Martin where he remained a year and a half. From this office he entered the office of Holabird & Roche and then the office of David Adler & Robert Work. At the time of his winning the Traveling Scholarship he had been with the firm of David Adler & Robert Work about a year. He has steadily advanced.

During all this time, Mr. Eiseman was actively engaged in doing problems in the Atelier, "after office hours," and his whole architectural schooling has been received in this manner. Early in his Atelier days he showed great interest and earnestness in his work and under the competent aid and guidance of the patron, Mr. Wm. E. Parsons, he made rapid strides forward. He is truly a product of the Chicago Architectural Club Atelier and one of which his fellow members are justly proud. Mr. Eiseman sailed on October 18th for Italy and plans to spend a year abroad continuing his studies.

THE JACOBSON ANNUAL $1,000 PRIZE COMPETITION

JACOBSON & COMPANY are offering $1,000 in prizes for a design for the decorative treatment of a theatre auditorium using ornamental plaster of stock design in any combination the designer may choose. The competition is open to everyone excepting professional renderers and architectural decorators maintaining their own offices. Entry to the competition is free. The purpose of the competition is to stimulate a wider interest in the use of ornamental plaster of stock design in interior treatment. The competition closes April 15, 1925. Any competitor who has not access to Jacobson & Company's catalogue may secure same and particulars of the competition by application, on his employer's letterhead, to Jacobson & Company, 241 East 44th St., New York City.



Details of Construction—House for Mr. Anson McKim, Montreal, Canada. John Calvin Stevens, John Howard Stevens, Architects, Portland, Me.

The Organization of Guilbert & Betelle, Architects, Newark, N. J.

James O. Betelle, 1; *C. H. Bauer,* 2; *G. A. C. Behee,* 3; *C. E. Pearce,* 4; *P. B. West,* 5; *R. J. Daly,* 6; *O. Vogelbach,* 7; *C. E. Krahmer,* 8; *H. C. McMullen,* 9; *L. C. Main,* 10; *R. P. Vreeland,* 11; *S. B. Freeland,* 12; *H. W. Hewittson,* 13; *W. J. Bondy,* 14; *P. J. Franklin,* 15; *G. Lindsley,* 16; *J. D. King,* 17; *A. Sieder,* 18; *E. H. Yarwood,* 19; *F. J. Everett,* 20; *G. T. Forman,* 21; *R. G. Heinerwald,* 22; *R. J. Rossi,* 23; *A. H. Farrow,* 24; *M. Cadzow,* 25; *M. Kugelman,* 26; *G. Throm,* 27; *M. Swift,* 28; *T. F. Stark,* 29; *L. L. Henry,* 30; *H. E. Stacy,* 31; *M. Villanueva,* 32; *W. A. Pieper,* 33; *E. W. Powers,* 34; *G. L. Dahl,* 35; *L. I. Moe,* 36; *H. D. Schiller,* 37; *C. M. Reinhardt,* 38; *L. Kabis,* 39; *J. Fendrick,* 40; *H. N. Wells,* 41; *C. Seeman,* 42; *J. D. Williams,* 43; *R. A. Davidson,* 44; *W. E. Caisse,* 45; *A. Merchant,* 46; *C. N. Voorhees,* 47; *A. F. Pistolese,* 48.

The effective presentation of the design for a small house by Julius Gregory, Architect, shown above is in the form of a scene painted by George Pearse Ennis and display back of a proscenium.

ENGLISH FOR STUDENTS OF ARCHITECTURE

DOES an architect need special training in English? If so, what shall be the contents of the course, and how shall it be taught? Such questions undoubtedly come to the minds of all those in charge of architectural schools and possibly to many professional architects. The question is answered by the Cleveland School of Architecture by a decided affirmative.

The actual instruction is secured by an arrangement with the Department of English at Case School of Applied Science, which is within a five-minute walk of the School of Art where the students in architecture work. A brief description of the course will perhaps be of interest to some, in the belief that instruction in English should emphasize the practical, professional uses of the language, taking for granted the value of a broader literary culture which may be more easily self-taught.

First, there is given considerable drill in the proper definition of words. A long list of architectural terms is assigned in ten-word groups for investigation in the dictionary and for illustration and for use in sentences. The various methods of definition are discussed together with the use of synonyms and the reason for the presence of synonyms. The formation of words with prefixes and suffixes, the combination of two words, the possibilities for new words and the reasons for foreign words are points discussed in connection with this list. Current copies of PENCIL POINTS are used as a further source of word study.

Second, attention is paid to the journalistic types of writing, as illustrated in a daily newspaper and in a magazine. The news story and the editorial, and the various forms of analysis such as summary, outline, paraphrase, and review are studied in connection with copies of a daily and of PENCIL POINTS. The paragraphing and the sentence structure receive careful attention.

Third, certain more specialized forms are discussed, such as the business letter, the advertisement, the report, and specifications, both as to their theory and their structure. A number of letters designed to meet specific situations are written in class. The task of the writer of advertisements, primarily as a problem in English, is discussed with the magazine in front of the pupils. The possibilities of the report in its many varied forms are illustrated by copies of printed commercial reports. Almost every issue of PENCIL POINTS contains interesting material for specifications and here the problem is as much a difficult one for the teacher as for the student because the approach of the teacher is that of the effectiveness of language and that of the student is the understanding of technical instructions. The harmonizing of these two points of view brings up a good many discussions about words and composition.

A weekly theme is required from each student. This theme is carefully criticized by the instructor and then revised by the student. A brief talk by each student and participation in class discussion offer some practice in oral expression, which is being further supplemented this year by exercises in story telling, reading aloud, and recitation of short passages committed to memory.

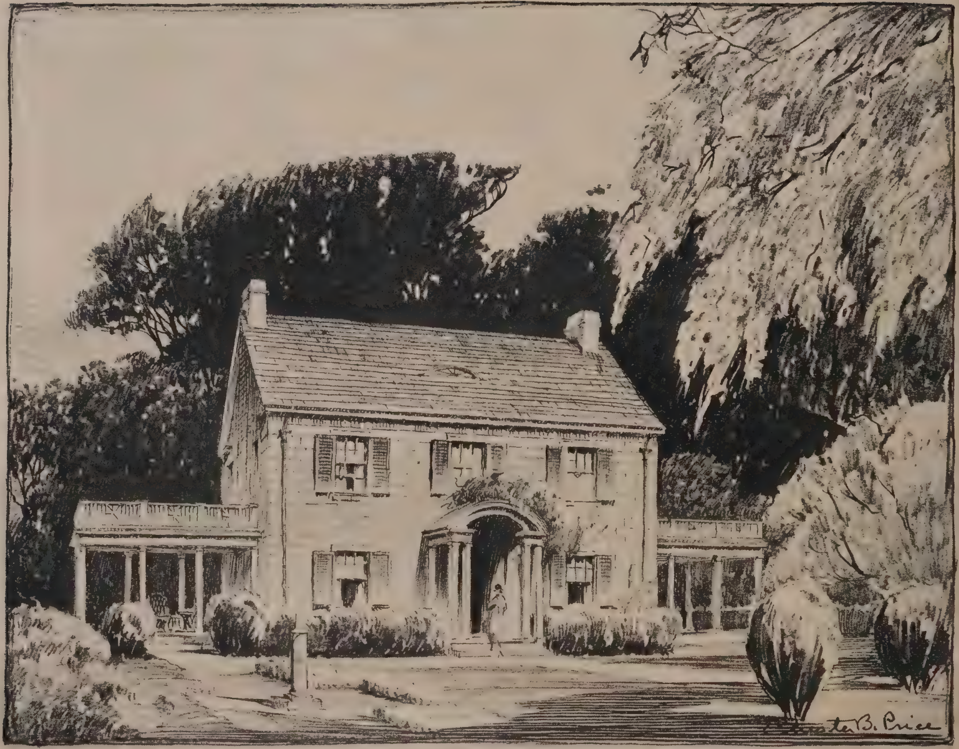
By these means we are seeking the cultivation of a facility in the use of English that will be of help to the professional architect.

KARL O. THOMPSON,
Associate Professor of English,
Case School of Applied Science.

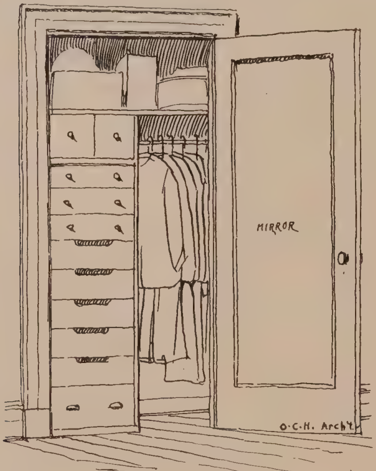
PARIS PRIZE FIRST PRELIMINARY COMPETITION.

THE first preliminary competition for the 18th Paris Prize of the Beaux-Arts Society will be held on January 3rd, 1925. The winner of this competition receives $300 quarterly, for two and one-half years study in Paris, where he is given the privileges of study in the first class of the Ecole des Beaux Arts.

The competition is open to all United States citizens under 27 years of age on July 1, 1925, without any other qualifications. This competition may be taken in any part of the United States. Further information will be furnished on application to the Chairman, at 126 East 75th Street, New York.

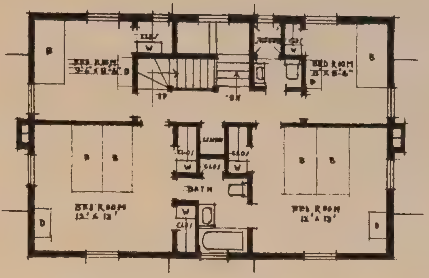


Rendering by Chester B. Price.

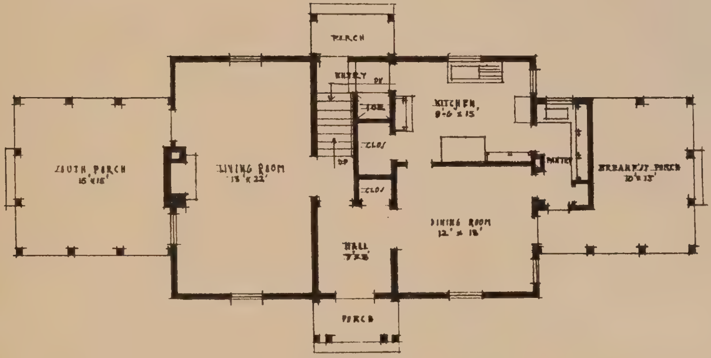


The Wardrobe Closet—A Substitute for the Bureau.

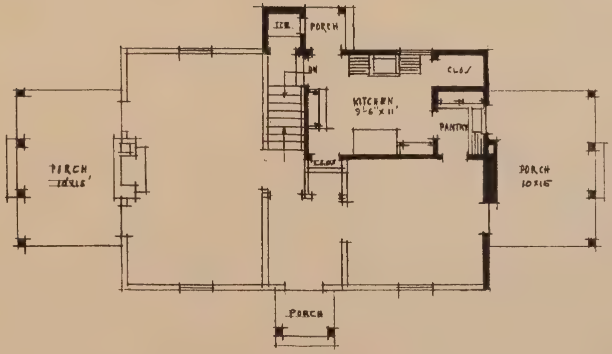
Design for a Small House. Oswald C. Hering, Architect, New York.



SECOND FLOOR PLAN

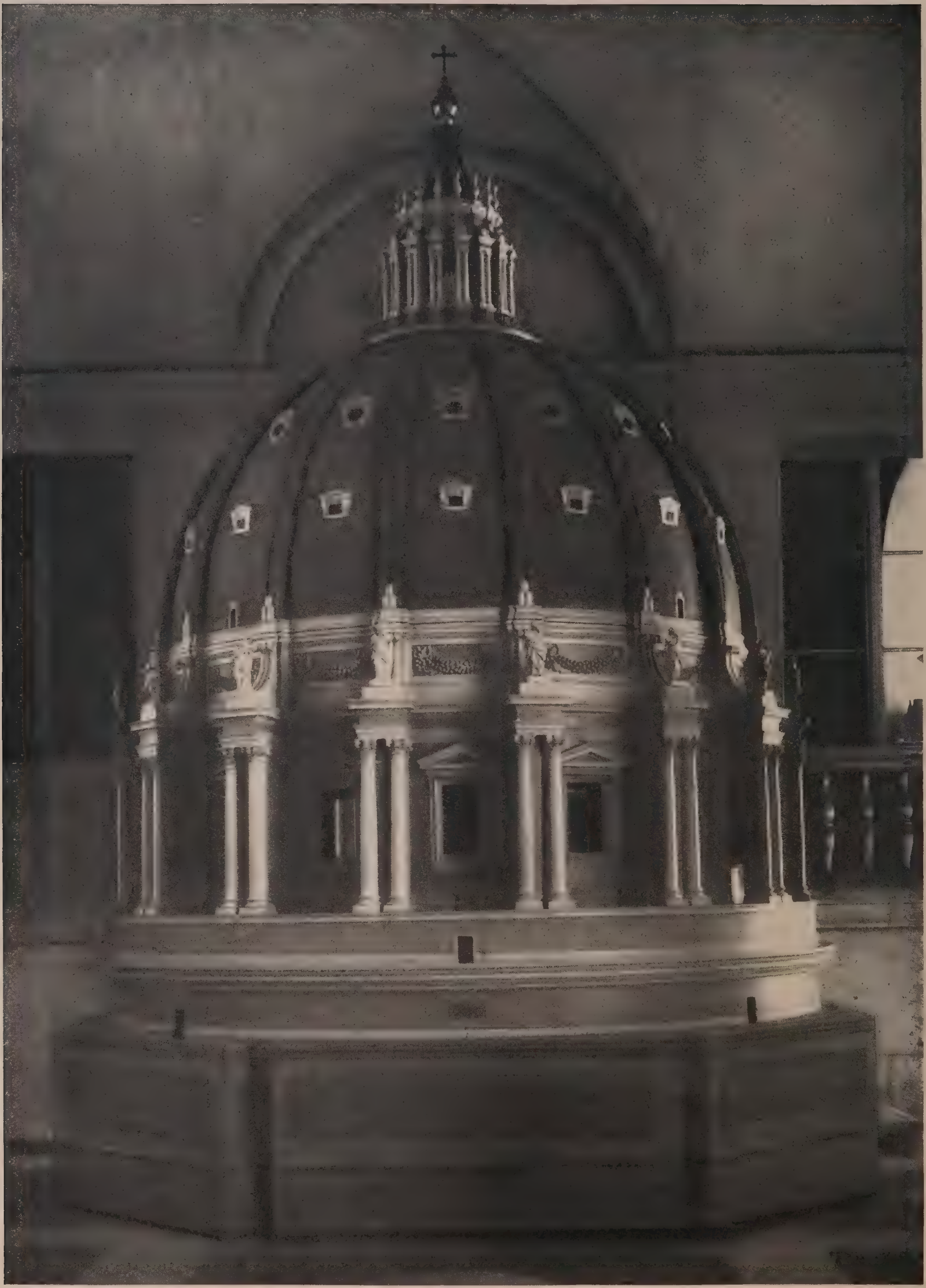


FIRST FLOOR PLAN

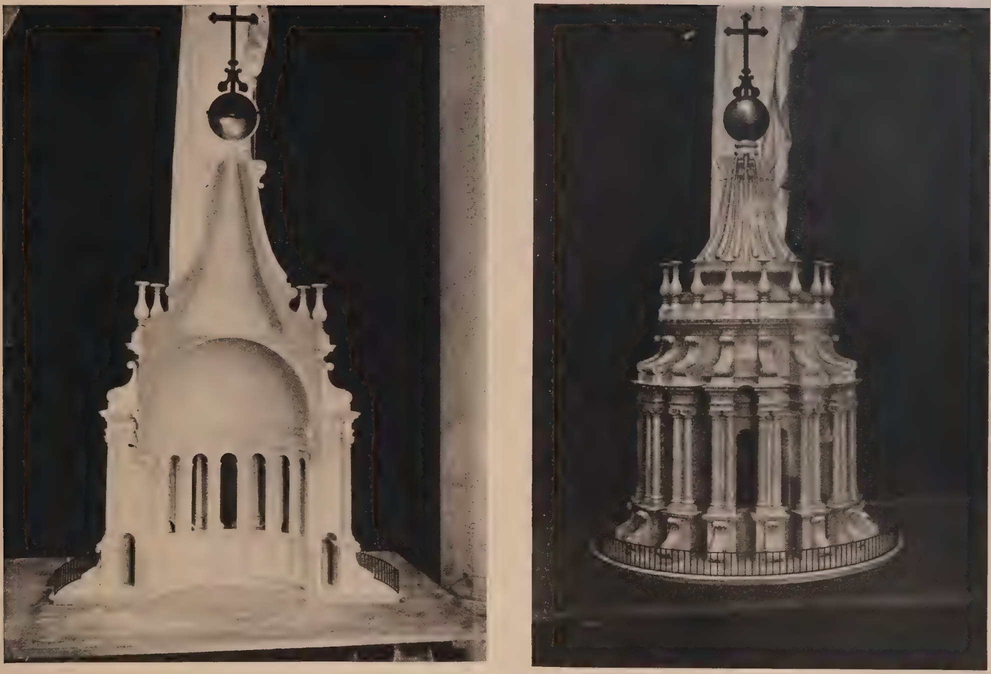


Alternate First Floor Plan. Smaller Porches, Kitchen and Pantry Will Effect a Saving in cost of About $1,000

Design for a Small House. Oswald C. Hering, Architect.



Exact Reproduction from Michael Angelo's Model for the dome of St. Peter's. Made for the University of Cincinnati, under the direction of Victor L. S. Hafner.



Exact Reproduction from Michael Angelo's model for Cupola of the Dome of St. Peter's. The Dome is reproduced on Page 88. *The model was made for the University of Cincinnati, under the Direction of Victor L. S. Hafner.*

A NEW ACTIVITY OF THE BROOKLYN CHAPTER OF THE AMERICAN INSTITUTE OF ARCHITECTS

THE Brooklyn Chapter of the American Institute of Architects is very desirous of recognizing and assisting the architectural draftsmen and students within its territory, and has planned an extensive educational program, intended toward the recognition, education and assistance of this body of the younger men of the profession. It is suggested that any who may be interested and wish further information communicate with Mr. Lester B. Pope, Chairman Educational Committee, Brooklyn Chapter of the A. I. A., Pratt Institute, Brooklyn, N. Y.

1. The program offers this body of draftsmen and students a form of associateship with the Brooklyn Chapter of the A. I. A., which will be known as the Student Associates of the Brooklyn Chapter of the American Institute of Architects; and which will offer to these men some real benefits; socially, educationally and professionally.

2. It is desirous of offering this Student Associateship to all architectural draftsmen and students who come properly recommended and who can qualify under any one of the following classifications, all applicants to be acceptable to the Educational Committee.

(a) Any architectural draftsman, with suitable experience, *Residing* or *Employed* in Brooklyn.

(b) Any student who has satisfactorily completed at least two years' day work in any recognized school of architecture within the territory of the Brooklyn Chapter.

(c) And any student of architecture with similar training, living in Brooklyn and attending any recognized school of Architecture.

3. There will be no initiation fee or dues of any kind to Student Associates.

4. The benefits offered the Student Associate body in this program are planned as follows, as nearly as they can be carried out:

(a) Affiliation with a Chapter of the American Institute of Architects, with the prestige which it may carry, a connection to be desired and one which may lead as the experience of the Student Associate and time progresses into membership with the American Institute of Architects.

(b) There will be special social and educational meetings of the Chapter held for the Student Associates and arranged solely for their benefit.

(c) Contact and identification, socially and otherwise, with men of the profession, all members of the A. I. A., which will have its stimulating influence.

(d) There will be offered to the Student Associate body, opportunity to see and hear some of the nationally prominent men of the profession, also to see their work and the work of others covering current important architectural work.

(e) There will be given the opportunity to enter as often as practical into competitions, which will offer as problems some real architectural problem of Brooklyn.

(f) These competitions will be awarded with judgments and ratings thus:

1. Substantial cash prizes, or an equivalent in tuition in any regular day, evening, or extension course in architecture in any recognized school of architecture.
2. Mentions.
3. Certificate of commendation or efficiency, bearing the seal of the Brooklyn Chapter.
4. By hanging in exhibition these competition drawings, which, if possible, will be open to the public.

5. There will be exhibitions as mentioned, of these drawings of the competitions, and also, as opportunity offers, the work of prominent men in the profession will be shown, especially surrent architecture.

6. Educational opportunities: There will be formed for the benefit of the Student Associate body an *Advisory Committee* of this Chapter, which will be available at all times through correspondence or direct contact, to assist any individual of the Student Associate body who may wish assistance educationally or technical or prefessional problems.

7. Employment Service: As soon as the Student Associate roster or list is complete, an index will be formed which will be, when completed, an employment service bureau which will be at the service of any member of the

Student Associate body and those seeking the services of trained men.

8. Bulletin: There will be worked out if possible, some system by means of which information will be placed in the hands of the Student Associate body. This will include such information as concerns the Brooklyn Chapter or the Student Associate body, also general information regarding current architectural and art work, exhibits of interest, competitions, books of interest, educational possibilities, school and college information, etc.

9. The American Institute of Architects: From time to time, as it is thought best by the Executives of the Chapter, A. I. A. documents and literature of the National order will be placed in the hands of the Student Associates.

10. Consistent efforts will be made to train all the members of the Student Associates in the principles of architectural practice, and the principles or ethics governing it, also to familiarize the younger men of the laws of State and nation that govern the practice of the profession in architecture.

11. If suffcient numbers apply, there will be formed in Brooklyn in a centrally located and accessible place, a Brooklyn Atelier of the Beaux Arts Institute, this under the patronage of the Brooklyn Chapter, with prominent men as patrons.

There will be ready for distribution in December a brochure prepared by the Committee on Education of the Brooklyn Chapter, which will contain the complete program and further information concerning the Student Associateship above mentioned. Copies of this brochure may be obtained gratis by addressing the Chairman of the Educational Committee, Brooklyn Chapter of the A. I. A.

MODEL OF ST. PETER'S DOME

ON OTHER pages of this issue are shown photographs of the model of the dome of St. Peter's, Rome, made under the direction of Victor L. S. Hafner, for the University of Cincinnati. This model is the only existing copy of Michael Angelo's original model, which was constructed of wood, was begun in 1547 and was under construction one year. The present dome of the church is 15.3 times the size of the model. The dimensions of the model are as follows: diameter 13 ft., height 20 ft. 6 in. The statues are of baked clay.

The careful study of Michael Angelo's model for St. Peter's dome, upon which this reproduction is based was carried on by Mr. Hafner during his residence as a Fellow of the American Academy in Rome. Mr. Hafner also made a very thorough investigation of the dome itself during that time.

ART ALUMNI OF PRATT OPEN STUDIO

THE Art Alumni Association of Pratt Institute has opened a studio in the Ovington Bldg., 246 Fulton St., Brooklyn. The studio is spacious, beautifully furnished and has excellent light, modern ventilation and all improvements. It is the aim of the association to provide a place where industrious members can receive the benefits and enjoy the privacy of a modern studio whereas a studio of their own would not be feasible or otherwise possible.

The studio is centrally situated and ideally planned and has been a pleasant surprise to all who have used it. It is supervised by Mr. Paul Schmidt who will be pleased to receive all inquiries addressed to the studio.

MASTER DRAFTSMEN

(*Continued from Page* 63)

tion. In his work as an architect, whether shown by his own drawings or those of his assistants or associates, the same high quality of presentation has remained characteristic. His vigorous drawing of his design which won the competition for the monument of the Great Lakes, about twenty years ago, has served as a model for several similar presentations in more recent years. His characteristic sureness and rapidity is well indicated in the sketches herewith reproduced—two sketches which were made in a half hour under stress of information that the client was about to leave for abroad.

Mr. Pope is an artist who *feels* refined form and color and its sure representation is inevitable in everything he does.

FRANCIS S. SWALES.

BOOKS RECEIVED

The Etchings of D. Y. Cameron, by Arthur M. Hind, Slade Professor of Fine Arts in the University of Oxford. The volume contains about 100 full-page plates, including sixteen in hand-printed photogravure, covering a representative selection from the artist's work. The introductory essay on Cameron and the choice of the plates has been competently taken care of by Mr. Hind, who is the author of "A History of Engraving and Etching" and other important works on these subjects. The volume will be a valuable addition to the material now available on Cameron's work and will be welcomed by all followers of this branch of art. Size 11½" x 9". Published in London by Halton and Truscott Smith, Ltd., Minton Balch & Co., New York Agents, price $13.50.

Problems in Architectural Drawing, by Franklin G. Elwood, Head of Department of Architectural and Mechanical Drawing, Mooseheart, Ill. The volume is intended for the beginner in architectural drawing and is a simple and practical treatise combining a working text and well-chosen problems. Published by The Manual Arts Press, Peiora, Ill. Price $2.25.

Library Buildings, by Chalmers Hadley. Notes and plans of buildings costing less than $50,000.00 intended to be of practical help. Architects will find that emphasis has been placed on many features in the details of library planning which differ from building details in other structures. Published by the American Library Association, Chicago, Price $3.50.

Roman Buildings of the Republic, An Attempt to Date Them from Their Materials, by Tenney Frank. Volume III of Papers and Monographs of The American Academy in Rome. Published by the American Academy in Rome, 101 Park Avenue, New York, Price $2.50.

INTERNATIONAL CONGRESS OF ARCHITECTS

THE "Proceedings" of the XIth International Congress of Architects held in Brussells, September 4-11, 1922, under the auspices of the "Societe Central d'Architecture de Belgique" has just been received.

The publication is unique as it gives an insight into particularly the European point of view of such subjects as the following: "The Responsibilities of the Architect"; "Schedule of Charges"; "The Appointment of State and Municipal Architects"; "Architectural Copyright"; "The Aims and Duties of the Architect"; "Women Architects"; "Public National and International Competitions"; "City Planning"; "Small Houses"; "The Regional Influence of Architecture"; "The Preservation of Historical Monuments."

An International Exhibition of Architecture was also held in connection with the Congress and many of the works exhibited have been reproduced in portfolio form by the Societe Central d'Architecture de Belgique. A few copies of the proceedings and the portfolio of drawings may be had from the Secretary of the Congress, R. Moenaert, Rue Artan, Brussells.

TEN COUNTRY HOUSES

A NOTABLE book is "Ten Country Houses Designed by Delano & Aldrich," just published by Doubleday, Page & Co., Garden City, N. Y. Price $15.00. This book consists of sixty-one plates reproducing pencil drawings by Chester B. Price. These are all sketches made on the ground and they show the completed buildings in general views, sketches of details and plans of the grounds. All are in Mr. Price's best manner and admirable. The idea of presenting architectural works through the medium of pencil drawings rather than of photographs is an excellent one, for in this way the artist can show the building as it appears free from the false emphasis on the unessential that is characteristic of the photographic transcript.

This book is a worthy record of the ten fine examples of country house architecture which it represents. All of these houses are worthy of careful study and examining them through the means of this book will give much pleasure to any one whose training has given him an appreciation of the refinements of design. There is an excellent introduction by Royal Cortissoz.

PENCIL POINTS

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HERE and THERE and THIS and THAT
conducted by
R·W·R

THE heading used for this column this month was submitted by Louis Michael, of New York.

J. Leland Benson, of Kansas City, gets the ten dollar prize for his book plate and linoleum-print Christmas card as published in the November number.

WHO says it does not pay to advertise? We published in our November number a letter from Conrad Callahan complaining bitterly at the quality of the verse we have published in this famous department, and what do you suppose happens? Why more verse of course!

Here's what Goldwin Goldsmith, professor of architecture at the University of Kansas, sends in, verse, prose and everything.

Architecture, I believe,
Is a serious profession;
But most of us, I know, would grieve
Without some humorous digression.

Though doggerel verse and slangy chat
May disappoint and shame the high-brow,
At "Here and There and This and That"
I would not even lift an eye-brow.

Undignified? It might be worse!
Let humor laugh at high-brow spleen.
Keep the cartoons and slang and verse,
Since you can keep the humor clean.

I rejoice to see my erstwhile student, J. Leland Benson break into your pages with his Brostrom book plate and his Christmas card. Nor did Benson tell *me* the significance of certain features of his book plate for Mr. Brostrom, but they are easy to read. The arch, which is not long, is the span of life of the average draftsman in the average office. Let us hope Benson's span is longer. The turrets indicate the fact that the draftsman is a tower of strength to the architect. The "two lean foliage looking trees" are the weekly or monthly stipend of the craftsman. You see, having been an architect myself I have seen the draftsman's point of view.

To revert to the matter of verse, please do not fail to observe that in the doggerel above I have used the word "doggerel" properly spelled, not as you have it, "doggrel." Either Mr. Callahan or your type-setter is responsible for the latter spelling, possibly both, since it occurs in his letter and in your comment.

And Louise Strother of Washington, D. C. dashes this one off and sends it to the firing line.

THE SONG OF THE BEAUX-ARTS STUDENTS

The Architects are a crazy bunch,
They haven't any mind—
They travel round with Chatelain in front,
And the rest of us on behind.

The student's life is full of blows,
Before our course is thru,
But the Beaux-Arts worst, and it knocks us out
For this is the way we do:

The first two weeks we slide along
With a carefree smile on our face,
We get out our things to start to draw
Then—"Hey get out of my place!

I'd like to know where my T-square's gone—
Who the deuce swiped my light?
—Don't feel like drawing anyway
Let's go to the movies tonight."

The next two weeks are about the same
Though you do get a little work done—
But you whoop and howl with the rest of the gang
And don't let work bother your fun.

But those last two weeks we slave and draw
With never a minute to spare,
As we try to work on the things that count
Omitting as much as we dare.

We drag our friends up three long flights
Our problems for to see.
They say "Oh isn't it just too sweet!
I especially like that tree!"

We drag our pals away from their boards
To give us a word of cheer.
They take one look, then give one groan,
You'll get an 'X,' old dear."

And when we get ready to render
We sling such wicked ink,
That the prof exclaims, "You've just one chance,
Hurry it straight to the sink."

We scrub it out and start again
As groggy as can be,
But the more we do the worse it gets,
'Till we leave, in despair, at three.

And gee, the day after that problem goes in
We feel like we've been thru a fight—
And we swear to the gang as we stagger along
"That's the last time I work Sunday night!"

But when the next charette rolls round
We still are going strong,
And to the tune of our squeaking pens
We gaily sing this song:

"Oh we'll crib our dope, we'll fudge our caps
We'll slave till our pens run dry,
We'll gaily peg at that last long lap,
—If only our problems get by.

We'll block in the shadows, and render them black
To cover the biggest defects,
We'll struggle along till we've got the profs fooled
And we're regular 'Archy-tecks'!"

And R. W. Schmertz of Pittsburgh sends this one.

Perspective is a noble art—
To find the vanish point
The draftsman's clothes must come apart
His elbows must unjoint:
The boss, impatient, hangs around,
And drives him to distraction
But when the vanish point is found
Oh ho! What satisfaction!

And Robert T. Gidley of Melrose, Mass., offers this one.

RHYME WITHOUT REASON

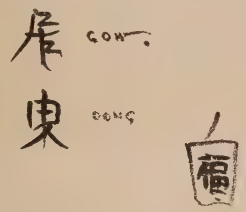
Johnny McFadd was a versatile lad
As clever, as clever could be
Just mention a thing, he'd do it by jing!
He was not to be stumped you can see.
He married a wife for the rest of his life
He longed for a home of his own
Not the kind you can buy, they did not take his eye
They simply compelled him to groan.
An' Architect's friend, said, "Johnny, I'll lend,
My aid to your plan for a nest!"
But Johnny said, "No! I gotta go slow,
To plan it myself will be best!
So he drew up a sketch, did this clever young wretch
On paper it looked very nice
It's simple as pie, thought this versatile guy
I'll bulid it and save half the price.
So he purchased a saw and lumber galore
A hammer, a square and a plane

With a confident smirk he started his work
Ambition surged hot in his brain,
He laid two by fours on the ground for the floors
He used six by eights for the walls
His rafters were light, but were all out of sight
And the shingles went on over all.
He papered the walls, and painted the halls
He worked himself into a sweat.
But at last it was done—he vowed it was fun!
He'd solved every problem he met,
As a matter of fact, the whole place was cracked,
The roof was an excellent sieve
It looked like a mess—and was one I guess,
And Johnny was broke as I live.

MORAL

You may be quite smart—but building's an Art!
Don't think you know all of the game,
Think of Johnny McFadd, and the hard luck he had,
With only himself to blame!

The others will have to wait until next month. Looks as though we would have to get the S. R. O. sign and stick it up in a prominent place pretty soon.



JUST to report progress in the Oong Gow matter. One of our sleuths almost caught up with him, but he got away. Determined to bring home something by way of evidence, however, he secured by tricks and device, and in a thoroughly unscrupulous manner, a rubbing of Oong Gow's signature as it appeared on a laundry ticket. Here is a faithful reproduction of the document. Anyone able to help us in our search is earnestly requested to send in any valuable information, however fragmentary in character it may be. We are determined to find Oong Gow.

By Joseph Johnstone Ott,
New York.

By Joseph Johnstone Ott, New York

AND the postman just hands us an imposing package, which, when examined, proves to hold one large colored sketch showing a barn dance in full swing, one black and white announcement of said barn dance and a piece telling all about it. We've reproduced the drawings on page 94 and here's the account of it:

DAY & ZIMMERMANN, INC., ASSOCIATION

AN ORGANIZATION comprising the employees and members of the firm of Day & Zimmerman, Inc., Engineers, Philadelphia, with an approximate enrollment of 200 members. Its purpose is to promote Literary and Social activities throughout the year. We have our outings, dances and dinners and on October 23rd we opened our Fall activities with a Barn Dance in an old time barn at Broomall, Pa., twelve miles from our office.

The farmyard was strung with dimmed lanterns in and about the trees, while the barn was tastily decorated with the foliage of fall! golden corn and fresh mown hay streaming from the loft. Yes, it was electrically lighted, which made it possible to show the goblins and real pumpkin lanterns with witches in strange corners. Oh! the eats! My! they were good. Yes, the cider barrel was there but only for a little while.

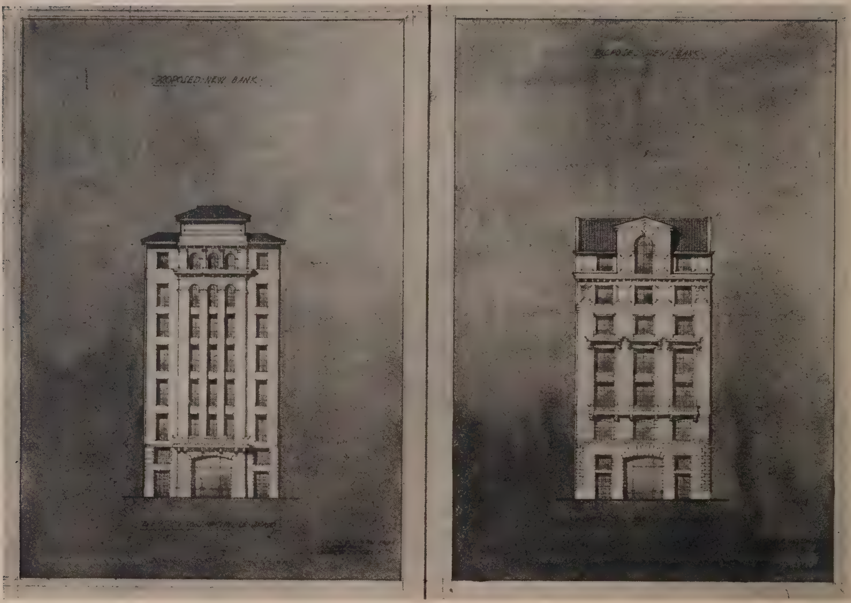
All of us were in overalls and ginghams. My! how strange were some and old fashioned. Can't you picture the scene with the dances, quads and hands all around, and then the games and the apple bobbing. All these went on all through the all too short evening. My! it was glorious.

This was not all, for toward the midnight hour two heckers brought in a well fed cow which was disposed of to the highest bidder.

It was a good, wholesome time and made us all feel proud of our connection with such a happy family organization.

Posters advertising the event were made by our Mr. H. H. Stewart, with the following committees carrying out the plans: A. L. Fowler, General Chairman; Miss M. Weidel, Decorations; Mr. W. F. Yeager, Electrical; Miss Emma Smith, Refreshments; Miss J. Blankenburg, Old and New Dances; Mr. E. L. Keenan, Purchasing; Mr. A. L. Fowler, Transportation; Mrs. E. Cummings, Games and Amusements.

This is the first communication of the sort we have had from an engineer's office and we shall be pleased to receive more.

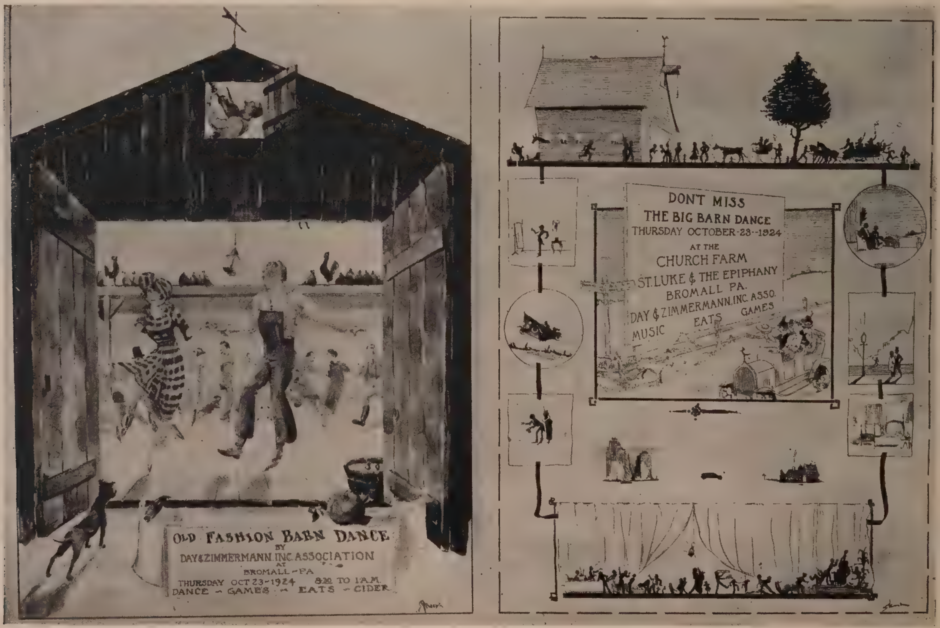


By Ernest T. Groves.

A WHILE ago we wrote a little piece and said we would like contributions from draftsmen working in foreign countries. Ernest T. Groves, articled pupil with Gunten and Gunten, architects and surveyors of London, sends us two of his drawings, designs for a bank, in Cheapside, London, reproduced above. It is hoped that other men will follow Mr. Groves' example. We are especially anxious to have good sketches, but we will consider for this column any material (even verse) from architects, draftsmen and students of architecture wherever located.

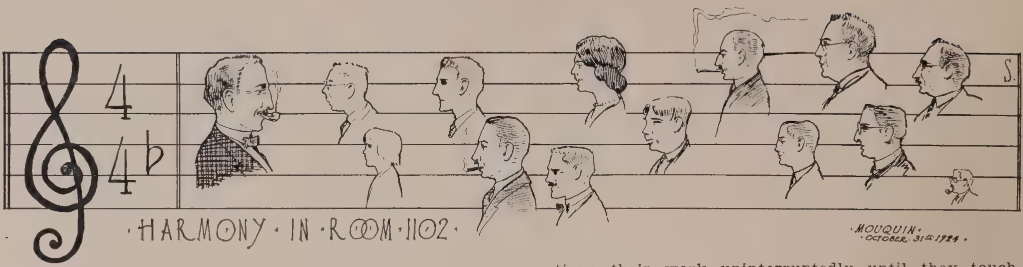
MR. ALBERT KAHN has returned from Italy. As proof of this we submit on the opposite page a reproduction of a colored cartoon done by Messrs. R. W. Hubel and R. E. Yates to commemorate the occasion. Sorry we cannot show the colors. They sure do stage some pagents in Detroit, if this is a sample.

Lauren B. Pohlman, architect, calls our attention to the fact that on page 93 of our November number we gave his address as Newark, N. J. It should be Elizabeth, N. J.


OLD FASHION BARN DANCE
BY
DAY & ZIMMERMANN INC. ASSOCIATION
AT
BROMALL - PA
THURSDAY OCT 23-1924 8:30 TO 1 A.M.
DANCE - GAMES - EATS - CIDER
DONT MISS
THE BIG BARN DANCE
THURSDAY OCTOBER-23--1924
AT THE
CHURCH FARM
ST. LUKE & THE EPIPHANY
BROMALL PA.
DAY & ZIMMERMANN, INC. ASSO.
MUSIC EATS GAMES

Posters made by H. H. Stewart, of Day & Zimmerman, Inc., Philadelphia, for the Organization's Recent Barn Dance. A Description of the Party appears on Page 93.

Colored Cartoon by R. W. Hubbel and R. E. Yates of the office of Albert Kahn, Architect,Detroit.



LITTLE informal parties, including all the folks from the office, seem to be quite the order of the day this season. The latest one to come to our attention was promoted and enjoyed by the staff of Henry C. Pelton's office. Here are the drawings and specifications, and we are sure that a grand and glorious time was had by all. Why not?

SPECIFICATION

for

Demolition, Preparation of Sight and
Interior Decoration (Especially)
Operation at S. E. Corner 28th Street and Sixth Avenue
New York
for

Disre Gardim — Owner
Moo Can — Contractor

To accompany tables prepared for
Henry C. Pelton, Architect,
151 W. 42nd Street, New York

GENERAL CONDITIONS

GENERAL

The accompanying table and these specifications are to be taken together, individually and collectively. Anything shown on the table and not mentioned in the specifications and anything mentioned in the specifications and not shown on the tables or anything remembered at any time by the Architect during the progress of the work shall be provided by the Contractor under this contract without expense to anybody but himself.

If he can do the work without expense to himself, the material shall be removed and supplied over again until the expense is satisfactory to the Architect.

ARCHITECT

The term "Architect" in these specifications shall be understood to mean the Architect or any of his official family or any uncivil, unsanitary, or incompetent engineer that he foolishly employs to assist in making trouble for all concerned.

WORKMANSHIP

All material is to be well done unless specified otherwise.

All mechanics shall start 6 inches from the tables and continue their work uninterruptedly until they touch them.

PLANS

The tables are to be considered diagrammatic, and are to be followed only where space conditions make it impossible to avoid so doing.

Anything that is right on the tables is to be considered fortunate, anything that is wrong on the tables shall be discovered by the Contractor and shall be made right without telling on the Architect or on the bills.

RULES AND REGULATIONS

The work throughout shall comply with all rules and regulations of all City, County, State Police and International Departments having or not having jurisdiction.

Violations of the 18th Amendment will be submitted for arbitration as herein provided for.

ARBITRATION

Should the material furnished by the Contractor disagree with the Architect, or should either the Owner or the Contractor disagree with any decision of the Architect, the matter will be submitted to three disinterested and disgusted parties, one each to be selected by the Owner, Contractor and Architect. As it likewise will be impossible for these three to agree, at the end of six hours they will be removed to special room reserved for these deliberations at Stamford Hall. In the meanwhile the decision of the Architect will be complied with.

GUARANTEE

The Contractor shall guarantee that he will keep in complete working order anything that the Architect asks him to attend to, so long as there is more work in sight in the Architect's office.

DESCRIPTION OF WORK

This specification is intended to provide for the complete demolition and consummation of the following:

TEST BORINGS (well shaken and thoroughly mixed)
SPRING PLANTINGS (John Allis' special)
Samples of Aggregate
PUREE OF GROUT (hot)
FISH (See list of N. Y. S. Architects)
POTATOES (Atlas, Lehigh or equal)
WHITEWASH and REDWASH
ROAST CAPON—reinforced as directed by the Architect
RUBBISH (Work to be left broom clean)
FROZEN CONCRETE (Forms to remain until set)
SAMPLES OF COMPOSITION FLOORS
MINWAX (in glasses)
CONTRACTOR'S GIFTS—10 d coffin nails, galv.

Yes its permanent.
The "Major ray" of sunshine!
32 Please!
Where are the vouchers?
Three prints to Crisoby!!!
What they [illegible]
Collar under the wing
Try my stock plans?
NOTE —
CONTRACTOR TO VERIFY ALL MEASUREMENTS UNDER THE TABLE
SCALE —
2 SHEETS IN THE WIND

THE SPECIFICATION DESK

A Department for Specification Writers

SPECIFICATIONS

By W. W. Beach

Here is the first of a series of notes or short articles dealing with the subject of Specifications contributed by Mr. W. W. Beach. Mr. Beach, past president of the Iowa Chapter of the A. I. A. has practiced in Sioux City, New York, Chicago and Foo Chow, China. He has always been greatly interested in specifications and he will discuss various phases of the subject in an informal and more or less sketchy manner. Comments are invited from all who would like to see improvement made in Specification practice. Communications should be addressed to The Specification Desk, care Pencil Points.—Editor.

THE general subject of "Specifications" has been essayed so often that it seems hardly possible that anything new can be offered under that heading. Yet there is constant complaint that hidden somewhere within the ramifications of the general scope of the topic lies one of the architect's unsolved problems.

Whether this be so or not, it is painfully evident to those who, through necessity or curiosity, peruse this product of the modern architect that there may be many who have not solved it.

Why, with the amount of material on the subject available, this should continue to be so is also a matter worthy of consideration. There are probably several reasons. But it is not meet that one should waste time with those who, through indifference or lack of remuneration for their services, make no attempt to produce a decent specification.

Nor need one worry about the novice who is still so enamoured of "creative architecture" that he deems beautiful working drawings the chief aim of his practice, rather than the production of successful buildings.

To him, the function of specifications, if of any import, is not sufficient to demand a great deal of attention. They can be re-hashed from any model or compiled by various kndly disposed "sales engineers." Says one of the latter, insinuatingly, "Great Scott, I write all the heating and ventilating for Lintle, Collum and Beam; why shouldn't you take advantage of the service?" He does and the enterprising engineer has made another sale.

Then, of course, there are many real architects who, with their assistants, have sufficiently mastered this branch of their business so as to be no more worried about it.

Eliminating all the foregoing, my appeal can be only to those who are conscientiously striving to better their practice, both for their clients' interest and their own, by trying to improve their contract documents. For these I do not purpose to offer either a standard or an ideal specification, but rather to lay the ground-work for both, from which proper specifications can be readily evolved.

Preliminary to this it is necessary to consider the purpose of a specification in order that one may determine the type fitted to the purpose.

At the present time there are prevalent three entirely different forms of building contract:

First and simplest, that by which a construction company executes a given work from its own designs.

Second, the form of contract formerly called "Day work," later "Force Account," now "Cost-plus" in its various guises—executed by a concern other than the designer.

Third, the "Lump-sum" or "Upset-price" contract.

For the first of these, founded as it is upon mutual confidence, rather than legal status, no more specifications are needed than will suffice to state the materials to be used, with a few directions as to their placement, to augment the information given on the drawings. Frequently, the entire specification can be annotated on the drawings, if the work is not too involved.

"Cost-plus" work needs but little more in the way of specification when executed by others than when the work is carried out by the same entity which prepared the drawings. The same element of reciprocated dependence pervades the operation in either case. That is, it does, unless the vicious clause naming a guaranteed maximum has been introduced, in which case the contract (while appearing not to) falls under the third heading—a plain lump-sum contract.

If such guaranteed maximum be made part of a contract of the first form, it is still more vicious inasmuch as the element of mutual trust is assailed by both parties—does not exist. The builder is forced to look to his own interest rather than primarily to that of his employer, hence the more brief and less definite he makes his specification, the best opportunity of keeping within his limit.

Obviously, any contract guaranteeing the cost of a given structure falls automatically into the third class, calling for complete working drawings and specifications upon which to found a definite, legal contract, eliminating every possible uncertainty. What the owner really wants is a guaranty of *minimum* cost whereas the offer of a *maximum* guaranty too often means just what it says.

One function of the specifications, then, is that of so clearly setting forth the work to be done by supplementing the drawings, that each competitive bidder will be able to determine exactly what is to be expected of him, if he gets the award, and can estimate accordingly; thus affording the owner the benefit of a minimum price to which he is entitled and, functioning further, legally compelling the contractor to provide the things upon which he figured and *as* he figured them.

This, then, will be the specification of which we will treat—one upon which it is intended, after the receipt of competitive bids, to found a lump-sum contract or several divisional contracts. The contract documents for such an agreement fall naturally into four major parts:

1. The contract, or agreement, itself.
2. The general conditions of the contract or of the specifications.
3. The specifications complete, other than the general conditions.
4. The contract working drawings.

The "General Contract" form of The American Institute of Architects answers well the purpose of the first requisite, when a general contract is the thing intended. When, however, it is desired to divide the work into a number of minor contracts, some other form is necessary.

Right here lies one of the most serious difficulties for the specification writer—that of so ordering the various divisions of work that each craft will have its own part distinctly set forth, with nothing omitted or duplicated.

The most comprehensive form of specification is therefore one on which a general contract can be founded, but including or excluding at will any major or minor division. Let us assume that we have such a specification and will use the American Institute form of general contract and an abbreviated form for minor contracts.

We must, then, have complete and concise general conditions to tie contracts and specifications together. For such purpose the form of "General Conditions" of the Institute are also good, though there are several paragraphs that will bear alteration or elimination and the arrangement can be improved upon. However, that is a matter of opinion and it is with fundamentals we wish to deal, hence we will assume a specification founded upon the use of A. I. A. (or some equally good) contract forms, including the general conditions of the contract.

Pre-supposing a specification for each major trade, there is at once the question of whether we will fix the boundaries of each sub-contract or compel the general contractor to shoulder his own responsibility in this respect. It is obviously not the duty of the architect, as such, to say to what extent the general contractor shall allot his work, but—it is plainly the duty of the architect to effect a smoothly-working job.

Inasmuch as his construction may be undertaken either by a concern which executes much of the work by its own forces or by one which sub-lets to a large extent (perhaps en toto) he must be prepared for either contingency and keep the ways equally simple for either procedure. By so doing, he makes it possible also to take separate bids on any part of the work, if that seems desirable.

But the taking of separate bids on divisions of the work leads to complications unless careful preparation is made for just such procedure.

It is obvious that the general conditions surrounding a major contract are different from those having to do with one of minor proportions. There is, in the two, a varying degree of responsibility for the whole operation which must be taken into consideration.

These variations should be taken care of by certain "Special Conditions" or "Supplementary General Conditions," introduced to bridge between the General Conditions and the divisional specifications.

Another phase of the subject demanding preliminary consideration is the fact that different classes of buildings demand different types of specifications. That for a small structure of simple function need not be the comprehensive affair we are about to discuss. It is even foolish to use the standard forms of general conditions for such construction. They don't fit. Many paragraphs don't apply at all. Bidders get out of the habit of reading such misfits and, when they fall into the hands of our legal friends, they make sad jokes of them.

Short forms are readily evolved by curtailing the more complete affairs and should be used for small work.

Above all things, let us use *common sense* with our specifications and thus escape all too general criticism of the professional man—that his erudition has out-stripped his common sense.

We will then take up first the preparation of specifications for a building of average size, one costing say a hundred thousand dollars or more. These will be readily capable of expansion to serve for much larger construction.

(*To be Continued*)

LABORATORY SPECIFICATION AND CONSTRUCTION HELPS

By Otto Gaertner

CHEMICAL laboratory work is of a special nature and requires many special kinds of construction and equipment. On account of the large amount of acids which are used in chemical work, attention must be paid to this phase of the work in order to specify non-corroding materials as far as possible, and to construct the building and its parts so that they may be easily cleaned and, when necessary, replaced.

On account of the nature of the work all piping should be installed so as to be accessible or exposed when possible. Waste pipes should be especially designed for acid conditions. Salt glazed hub jointed tile sewer pipe is the best in most cases. There are cast iron pipes on the market which are cast from an alloy having a large amount of silica in it. These pipes are smaller in size and take up less space than the tile pipes but are not quite as acid proof. The hubs of these pipes are caulked the same as ordinary cast iron pipe but more care should be used as the silica in the alloy tends to make the pipe more brittle. Large size pipes may be put together with flanges and bolts, lead gaskets being used in the joints. While this kind of pipe is more expensive than the tile pipe, it makes a stronger job on completion and lends itself better for hanging horizontal lines which are run exposed.

When the tile piping is used, the joints are made with hot asphalt, which is acid proof. The joints are caulked with oakum and the asphalt is poured in place almost filling the joint after which the balance of the joints are filled with a strong mixture of Portland cement mortar splayed away from the edges of the pipe hubs at an angle of forty-five degrees or more to give the cement mortar strength and body. If such piping is hung there should be a hanger at every hub. This brings the hangers pretty close together since the tile pipe comes in two foot lengths whereas the cast pipe comes in four foot lengths. Often the cast pipe is used for exposed horizontal runs and the tile pipe for the horizontal runs in unexcavated portions of the building and under the basement or cellar floor. The specifications should call for a separate tile drain for the acids since it is not good practice to make the general waste lines, or house drains as they are called, of tile pipe within the walls of the building. The house drain should be of ordinary extra heavy cast iron pipe. There is no objection to using this kind of pipe when acids are to flow through it, if the plumbing of the system can be so arranged that the different fixture connections will be behind—that is, on the side away from the sewer—the acid waste connections so that the acids will be diluted sufficiently not to attack the cast iron pipe. Leader connections can also be made to help in the diluting and cleaning out of the acids. When the acids are taken care of in separate tile house drain lines, they should be specified to extend outside the building where they should connect with the tile sewer beyond the point where the cast iron house drain has been connected with the sewer. A trap and fresh air intake should be specified to be placed in an accessible position just inside or just outside the foundation wall with the necessary pit and cover.

When tile vertical stacks are specified it must be remembered that they take up considerably more space than the common wrought iron, steel, and cast iron stacks, especially over the hubs. They must be rigidly built-in or held in place so that the joints will not be forced open. Vent stacks in connection with the fixtures cannot be made less than two inches in the tile pipe and they can not be placed so close to the waste stacks as in the case of the metal piping since the tile fittings are rather clumsy and often distorted. Waste connections should preferably be brought to the face of the plaster behind the fixtures so that no built-in metal work can corrode. It must be remembered that since tile fittings are rather large, the stack may have to be placed farther into the wall. Otherwise the fitting will project beyond the face of the plaster and not look so well. The fixtures should be provided with lead traps having cleanouts, not only for economy but also because the lead traps are not so likely to corrode as are traps of other metals. The more expensive special silica cast iron traps may also be used but they are much larger than the lead traps in appearance and must be painted to keep them from discoloring. The lead traps need not be painted and they are easily replaced.

The specifications should call for all exposed metal piping to be painted with asphalt paint as a protection from acid fumes which are prevalent in chemical laboratories. Nickel plated fittings should not be specified at the fixtures as they quickly tarnish, corrode and become covered with verdigris. Fittings made of the alloy known as red brass, or red metal, are much more serviceable and look better. Also brass pipe of iron pipe size should be specified for water piping, especially in the case of hot water and hot water circulation pipes. If the appropriation will permit otherwise galvanized genuine wrought iron should be used.

In our larger schools and universities the laboratories are often large rooms with long rows of laboratory tables, regularly spaced and having vitrified earthenware sinks at the ends of the tables. The sinks of the tables are usually about four feet from the walls of the room and connections from them may not be very desirable on the ceiling below. The same applies when the sinks are in the centers of the tables. Also the wastes from the sinks would have to go through the floor, resulting in obstructions when cleaning the floor and replacements of corroded piping would necessitate patching the floor and the ceiling below. To simplify the plumbing in such cases, gutters in the floor have been resorted to.

A few words here regarding the floors would not be amiss as it has a bearing on the construction of the gutters. Chemical laboratory floors should be acid proof. Unscrupulous representatives of firms specializing in such floors may use the words "acid proof" when in reality they mean, or their product is only, acid resisting. The difference is generally in the aggregate used in the floor. Such floors are generally made of hot natural asphalt with a fine aggregate of a limestone nature. The asphalt is acid proof but the aggregate is only acid resisting. The acid resisting aggregate is more economical and may answer the purpose, each piece being protected by the surrounding asphalt binder. But the wearing surface will in time be worn so that some of the aggregate will show and be at the mercy of acids spilled on the floor. Even then it would be a long time before any serious damage could result if the spilled acids were promptly removed, acids in powder or crystal form included. For an acid proof aggregate vitreous quartz and silica are generally specified and a chemical text of the aggregate is recommended. The specifications should also state the proportions of asphalt to aggregate, the amount and kind of flux to be used with the asphalt, and the kind of asphalt. Commercial artificial coal tar asphalts are not recommended. One objection to asphalt floors is their softness and the fact that heavy furniture will mar them.

Such furniture and radiators may rest on slate blocks set flush with the top of the asphalt if the location is permanent. Otherwise the weight should be spread over an area of the floor and not at a few small points. Also a harder asphalt may be used. The amount of flux which is used will determine the hardness of the floor. If a hard asphalt floor is exposed to extreme cold it will crack but this generally does not occur with a building. The asphalt floor is generally applied about one inch thick over a smooth concrete under floor. The gutters hereinbefore mentioned are also formed in the concrete and finished with asphalt. The pitch should be formed in the concrete.

(*To Be Continued*)

PUBLICATIONS OF INTEREST TO THE SPECIFICATION WRITER.

Any publication mentioned under this heading will be sent free, unless otherwise noted, upon request, to readers of Pencil Points *by the firm issuing the publication. When writing for any of these items please mention* Pencil Points.

Ball Bearing Door Hangers and Special Hardware.—New Catalog No. 24. This handbook illustrates and describes hardware for all types of sliding and folding doors, overhead carrying devices, expansion bolts, ball bearing wheels, rolling ladders, etc. Fully illustrated, specification data, tables of sizes, fully indexed. 50 pp. 8½ x 11. McCabe Hanger Mfg. Co., 426 West 25th St., New York City.

English Precedent for Modern Brickwork.—New book showing a selection of the best English buildings in brick. Colored frontispiece, many full page plates and measured drawings. Text on the subject, including chronology of English brickwork from 55 B. C. Heavy plate paper. 100 pp. 8½ x 11. Price $2.00 The American Face Brick Assn., 1760 Peoples Life Bldg., Chicago, Ill.

Architectural Monographs on Tile and Tile Work No. 1.—The first of a series of 15 Monographs covering the subject with especial reference to the role that tiles have played in the building arts. Profusely illustrated largely with original material accompanied by an interesting text prepared by Rexford Newcomb. 30 pp. 8 x 11. Associated Tile Mfrs., Beaver Falls, Pa.

Published by the same firm, Ceramics in Architecture Monograph No. 2. Ceramic architecture in ancient Egypt, Babylonia and Assyira. Text by Rexford Newcomb. 30 pp. 8 x 11.

The Book of Decoration.—Brochure profuse illustrated covering typical rooms in the various period styles, together with their furnishing accessories. Notes on wood finishing. 50 pp. 8½ x 11. Murphy Varnish Co., Newark, N. J.

Armstrong Cork Linoleum Floors.—Specification folder and complete description. Revised edition. Gives the busy specification writer all the data required to select and specify linoleum for all uses. Color plates. Directions for laying and caring for the floor. Standard filing size, 8½ x 11. Armstrong Cork Co., Lancaster, Pa.

The Fireproofing Handbook, 8th Edition.—Deals in text, photograph and diagram with the various problems of modern fireproof construction. Condensed specification data. Covers all types of construction commonly met with. 72 pp. 8½ x 11. The General Fireproofing Co., Youngstown, Ohio.

Published by the same firm. Herringbone Rigid Metal Lath. Data showing the application of metal lath in all types of modern construction. Profusely illustrated with drawings, specifications, etc. 50 pp 8½ x 11.

Plastering Specifications.—Specification folder just issued covering standard forms for various kinds of work, arranged for the convenience of the specification writer. Standard filing size. The Best Bros. Keene's Cement Co., Medicine Lodge, Kansas.

The Campbell Solid Metal Window. — Descriptive catalog, profusely illustrated with photographs and renderings of many important buildings, together with details of windows installed, notes on special construction, etc. 60 pp. 8½ x 11. Campbell Metal Window Corp., 8 West 40th St., New York City.

Natco Wall Construction, Bulletin No. 174.—Revised edition, covers application of hollow tile in all types of wall construction. Drawings at convenient scale. Specification data. 32 pp. 8½ x 11. National Fireproofing Co., Fulton Bldg., Pittsburgh, Pa.

Atlantic Terra Cotta.—Monthly magazine for architects and draftsmen, Volume 7, No. 3, deals with the Disappearance of Architectural Landmarks, with many interesting illustrations of details of Madison Square Garden. Atlantic Terra Cotta Co., 350 Madison Ave., New York City.

Chancel Furniture.—Illustrated brochure covering subject of special furniture for the Chancel and other furniture accessories for the Church. 24 pp. 8½ x 11. American Seating Co., 14 East Jackson Blvd., Chicago, Ill.

Science and Practice of Integral Waterproofing, 4th Edition.—Handy booklet covering subject in condensed form. Directions, detail drawings and specifications. 32 pp. The Truscon Laboratories, Detroit, Mich.

Keeping Down the Cost of Heating.—Booklet on the subject of the Molby boiler for low pressure steam, vapor and hot water. Much useful data, tables of sizes, capacities, sections, etc. 24 pp. Molby Boiler Co., 41 East 42nd St., New York City.

Armstrong Cork Tile Floors.—Brochure just published covering complete information for the architect, specification writer and draftsman. Designs in natural colors. Specifications and detail drawings. 36 pp. 8 x 11. Armstrong Cork and Insulation Co., 24th Street, Pittsburgh, Pa.

Ruud Automatic Storage Systems.—Catalog dealing with hot water for the home, individual and commercial use. Typical layouts and specification data. 30 pp. 6 x 9. Ruud Mfg. Co., Pittsburgh, Pa.

Contractor's Atlas.—Monthly publication dealing with matters on which Portland Cement is a factor. 20 pp. 6 x 9. Atlas Portland Cement Co., 25 Broadway, New York City.

Plate Glass in Residence Design.—Brochure with many interesting illustrations dealing with modern fenestration. 20 pp. Plate Glass Mfrs. of America, 1st National Bank Bldg., Pittsburgh, Pa.

Majestic Steel Medicine Cabinets.—Bulletin showing line of modern steel equipment, instructions for installing, etc. Standard filing size, 8½ x 11. The Majestic Steel Cabinet Co., 4223 Belle Plaine Avenue, Chicago, Ill.

Monarch Metal Weather Strips. — Data book with drawings and much information on air leakage and other similar problems. 50 pp. 8½ x 11. Monarch Metal Weather Strip Co., 5020 Penrose St., St. Louis, Mo.

Ilg Condensed Catalog.—Covers complete line of ventilating equipment, fans, blowers, etc., both large and small. Tables of dimensions and capacities. 50 pp. Vest pocket size. Ilg Electric Ventilating Co., 2850 No. Crawford Ave., Chicago, Ill.

Door-Ways.—Monthly magazine covering interesting items pertaining to window hardware, garage and other rolling doors, overhead carriers in industrial plants, etc. Richard-Wilcox Mfg. Co., Aurora, Ill.

Universal Safety Treads, Bulletin No. 40.—Document of interest to specification writers on the subject of modern stair construction. Standard filing size. Universal Safety Tread Co., 40 Court St., Boston, Mass.

Gypsum Plasters—General Instructions and Specifications.—Treatise by Virgil Marini prepared with especial reference to the architect and builder. Covers non-technical form of specifications for all types of Gypsum plasters and plastering work. Specifications arranged for the convenience of the busy man. The Gypsum Industries, 844 Rush St., Chicago, Ill.

Published by the same firm, Gypsum—A Non-Metallic Mineral. Treatise covering in both technical and non-technical form the properties of Gypsum for building construction use.

Win-Dor Casement Window Operators. — Catalog No. 9 describing modern casement hardware, sectional drawings and standard half size details. 14 pp. 8½ x 11. The Casement Hardware Co., 235 Pelouze Bldg., Chicago, Ill.

Celotex Specifications.—Loose-leaf folder with large sample of material. Complete specifications for all uses, details of construction covering exterior finishing for frame buildings, sheathing for brick veneer buildings, roof insulation and a variety of other uses. 8½ x 11. The Celotex Co., 645 No. Michigan Ave., Chicago, Ill.

Mortar Colors.—Data sheet with 12 panels in color showing mortar joints in combination with brick of various colors and textures. Also much useful information on the coloring of stucco. 8½ x 11. Clinton Metallic Paint Co., Clinton, N. Y.

Architectural Varnishes, Stains, Fillers and Enamels.—Specification for all classes of work. Recommendations for standard and unusual finishes. 20 pp. 8½ x 11. Standard Varnish Works, 445 Fourth Ave., New York City.

International Casements.—Attractive booklet on subject of windows for homes of distinction and charm. Illustrations of excellent English and American domestic architecture, drawings and photographs, interiors and exteriors. 24 pp. 8 x 10. International Casement Co., Jamestown, N. Y.

The Kernerator.—Covers disposal of rubbish and other waste in residence and apartment buildings. 40 pp. 6 x 9. The Kerner Incinerator Co., 1003 Chestnut St., Milwaukee, Wis.

Published by the same firm, The Sanitary Disposal of Waste in Hospitals, also Blue Prints with Complete Instructions as to layouts for all types of buildings.

Norton Floors.—Booklet dealing in an interesting way with Non-Slip Treads showing many applications in modern buildings with especial reference to harmonious decorative effects. Norton Company, Worcester, Mass.

Weisteel Compartments.—Catalog No. 11 describing compartments of all types. Blue prints showing construction and method of erection. Specification, including hardware. A useful book to all in any way interested in industrial buildings, public buildings, schools, hospitals, etc. 32 pp. 8½ x 11 in. Henry Weis Mfg. Co., Atchinson, Kan.

INTERNATIONAL ARCHITECTURAL EXPOSITION

IT is expected that at least ten foreign countries will send to the Architectural and Allied Arts Exposition to be held in New York City from April 20th to May 2nd next, exhibits which have never before reached America.

Members of the Foreign Exhibits Committee of the forthcoming exposition said yesterday that England has definitely decided to participate in the exposition as also have Finland and Poland. The Baltic states will send over depictions of what is the only new architecture in the world today, in the opinion of one member of the committee, a prominent architect who has lately returned from a tour in Europe. Finland, Norway, Sweden, Poland and other Baltic states have successfully undertaken to develop a new and drastically different architecture, it was said. With the merits of any selections they may make unquestioned, the committee has left the question of the exhibits they will send entirely in the hands of the Baltic states. Thousands of architects throughout the country will have a special interest in these exhibits.

France has offered to send drawings of historic buildings in the republic.

While a great many foreign exhibits are pending acceptance by exacting exhibition committees abroad, only a few have been accepted to date. However, it is believed that within a few months they will begin sending here the finest collection of foreign architectural displays and allied arts that has ever been put on public exhibition in this country.

Among England's contributions to the Architectural and Allied Arts Exposition will be about ten special exhibits consisting mostly of original drawings of their famous buildings. The drawings of St. John's Cathedral in Liverpool for which Sir Gilbert Scott was knighted by the King will be sent to New York. The new unique addition to the Bank of England will be illustrated by the drawings of Herbert Baker. It is believed that the Bank of England is the only institution where the custom of having Government soldiers guard the place at night and go away in the morning is still practiced. Mr. Baker designed for the famous house of Cecil Rhodes in South Africa. Sir Chas. Burnet will send drawings of his Church work. Sir Reginald whose designs for country homes are recognized throughout England will send drawings of some of his best work. The new Canadian building in London on Trafalgar Square will be shown in the drawing of Septimus—Warrick.

Sir Edward Lutyens who designed the famous cenotaph of Memorial Soldiers has consented to send some of his drawings. Among those most actively responsible for bringing to New York what is believed will be the largest architectural exhibition in the world and also the first convention of the American Institute of Architects that has been held in New York in many years is President D. Everett Waid of the American Institute of Architects under whose auspices the forthcoming exposition will be held. Mr. Waid is chairman of the General Committee of the forthcoming exposition. The exposition is under the active management of Charles H. Green, 105 West 40th Street, New York, former director of Manufactures and Varied Industries at the Panama-Pacific and other world expositions. Extraordinary interest in the exposition is being taken in all parts of the United States by architects and all those who provide materials for the construction, equipment, and decoration of homes and buildings, Mr. Green said yesterday. Harvey Wiley Corbett, President of the Architectural League of New York which will make its annual exhibit at the exposition is chairman of exhibits of the forthcoming big display.

NATIONAL EXPOSITION OF POWER AND MECHANICAL ENGINEERING

THE Third National Exposition of Power and Mechanical Engineering will open at the Grand Central Palace, New York City, on Monday, December 1st, at noon and close Saturday, December 6th at 10:30 p. m. The Power Show functions as a clearing house of information about the recent developments in power and mechanical engineering. The exhibits will be of interest to all industries which use heat or power in any form or have any problems in mechanical engineering. During the course of the show lectures by prominent men will be given on the following subjects: The Boiler Room, Steam Prime Movers, Oil and Gas Engines, Hydrolectric Power Plant Equipment, Materials Handling, Modern Machine Tool Developments, Mechanical Power Transmission, Mechanical Refrigeration, Heating and Ventilating. The Exposition is administered by the International Exposition Company, the managers of which are Fred W. Payne and Charles F. Roth, with offices in the Grand Central Palace.

GEORGE WASHINGTON UNIVERSITY PRESENTED WITH GIFT

ONE of the largest and best collections of architectural drawings and photographs ever assembled was recently presented to the Department of Architecture of George Washington University, Washington, D. C., by Mrs. D. N. B. Sturgis, of New York, widow of the late Russell Sturgis. The collection presented by Mrs. Sturgis consists of thousands of photographs and plates from which Mr. Sturgis secured the data for his work on *The History of Architecture.* The collection, which is one of the largest and most carefully selected groups of its kind, will be catalogued and placed in the circulating library of the architectural department of the University.

WORKING DRAWINGS

(*Continued from Page* 46)

flattened curve than the one I have suggested but it takes even less room on the board, in the case given above about 11″ high by 12″ wide. Mr. Stevens' idea is that if you lay out the vertical height of the shaft at ⅜″ scale, drop a perpendicular and lay off on the base line four times difference between the top and the bottom diameter and connect these you will have the diminution. Then establish the vertical height of your maximum entasis, that is, the height on the shaft at which the entasis projects fartherest *horizontally* from the line of diminution. Then of this horizontal line lay off the maximum entasis (I won't go here into the question of the method of establishing these dimensions; it is a question of design based on experience). This will give three points in the curve, the top, the bottom and the maximum entasis. Then draw a parabola or a hyperbola or double ones through these points and you will have the curve from which ordinates can be obtained in the manner outlined above, remembering always that the horizontal dimensions must be divided by 4 to give the actual figure. Mr. Stevens thinks, and I believe it quite possible, that the Romans laid out their entases that way. It's evident they could not do it full size very well, but this sort of a scheme could be laid out on a smooth piece of marble or scratched on copper. I would advise those who are interested in this method to get Mr. Stevens' monograph, it is extremely interesting, but he does not go into detail as much as I could wish. The method I use is, however, quite simple, and, if carefully done, is more accurate and much quicker than the old full size method.

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